DOCUMENT RESUME

ED 288 026	CE 048 893
AUTHOR	Tulloch, Charlotte
TITLE	Vocational Teacher Education Study.
INSTITUTION	Kentucky Univ., Lexington. Coll. of Education.
SPONS AGENCY	Kentucky State Dept. of Education, Frankfort. Office of Vocational Education.
PUB DATE	87
NOTE	438p.
PUB TYPE	Reports - Research/Technical (143) -- Statistical Data (110) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC18 Plus Postage.
DESCRIPTORS	Academic Achievement; Employment Projections; Higher Education; Labor Needs; Labor Supply; Outcomes of Education; Postsecondary Education; Teacher Attitudes; *Teacher Characteristics; *Teacher Education; *Teacher Education Programs; Teacher Employment; Teacher Persistence; *Teacher Qualifications; *Teacher Supply and Demand; *Vocational Education Teachers
IDENTIFIERS	*Kentucky

ABSTRACT

A study was conducted to determine the present state of vocational education in Kentucky and the supply of and demand for vocational teachers. Results are summarized for vocational teacher education in general and for teachers in the areas of agricultural education, business and office education, marketing and distributive education, health and personal services occupations, home economics education, industrial arts and industrial education, and special vocational education. Information is provided on numbers of teachers, age and experience, turnover, rank, degrees completed, enrollment in higher education, degree goals, institution awarding first degree, historical perspective, enrollment patterns, faculty, enrollment and output, follow-up of graduates, and potential changes. This document contains 166 statistical tables. Data from a national survey of vocational education teachers are also included. Appendixes include the study instruments and related documentation. (KC)

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VOCATIONAL TEACHER EDUCATION STUDY

by

Charlotte Tulloch

1987

Department of Vocational Education
College of Education
University of Kentucky
Lexington, Kentucky 40506

Project Number: 12-33-540-DCCJ-04-04-
M4X-T1800-4817-0541-87-30

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VOCATIONAL EDUCATION
43 DICKEY HALL

January 30, 1986

Office of Vocational Education
Kentucky Department of Education
Capital Plaza Tower
Frankfort, Kentucky 40601

To Whom It May Concern:

The accompanying report for the Vocational Teacher Education project is herewith submitted to the Office of Vocational Education, Kentucky Department of Education.

The report contains extensive data relative to vocational education teachers and teacher education programs in Kentucky. Original project plans also called for development of recommendations based on data in the report. It was planned that groups of Kentucky vocational educators would review the data and assist in the formulation of these recommendations. It became evident, however, that this was not appropriate due to differing frames of reference and difficulty in reaching consensus. In light of this, it would appear that a variety of groups need to review the data and discuss their relevance and application to particular situations. Perhaps future consideration of the report by a variety of publics including members of the OVE-UCC and/or outside, disinterested groups would be appropriate and would result in the generation of specific recommendations.

Additionally, such groups might generate recommendations for future research efforts designed to adequately inform decision-makers regarding vocational teachers and teacher education delivery systems. For example, the present study did not address service activities to the state or region, or such aspects as field-based teacher education.

We were pleased to be able to work with vocational educators from across Kentucky in the generation of this report. We hope that the results of this effort and the data generated will be of value in the continued advancement of vocational education in the Commonwealth of Kentucky.

Yours truly,

Clayton P. Omvig

Clayton P. Omvig

Charlotte Tulloch

Charlotte Tulloch

ACKNOWLEDGEMENTS

Many people were involved in the compilation of this report. Without them it would not have come about.

Thanks go to the vocational education faculty at the University of Kentucky who served as field testers for the teacher education survey instrument. And many thanks are extended to vocational teacher educators in all the state universities who completed the teacher education surveys--and to their coordinators or department heads.

The development and administration of the vocational teacher data form involved a large number of people. Thanks go to Warren Lacefield for assistance in the design of the form and to personnel at Central Kentucky State Vocational-Technical School and Southside Vocational School, both of Lexington, for serving as field test sites. We are also most grateful to the regional directors who distributed the forms to all their schools and then collected the forms and returned them to us. Their help insured our high rate of return. We also acknowledge the input of all the state-employed teachers in filling out what must have been "just one more form to do."

A great deal of credit also goes to Kathy Blomquist for her calm help in doing all the computer work related to compiling the vocational teacher data.

Many members of the Kentucky State Department of Education contributed to this project in one way or another. In particular, Jim Byford and the staff of the Occupational and Management Information Unit, Office of Vocational Education, provided considerable help as well as data from their records. Also of particular value to this project were Wendell McCourt and his staff in the Division of Computer Services of the Kentucky State Department of Education who provided the data on reimbursed vocational teachers.

Very special thanks go to the writers and researchers of the historical perspectives: Dr. Harold P. Binkley for Agricultural Education; Dr. David McMurtry for Business and Office Education; and Jewell Deene Ellis for Home Economics Education. Drs. L. C. and Doris McDowell also wrote material for the earlier years of health occupations, and Jane Kelly, Dorothy Ray, and Dr. Norma Jean Schira assisted in bringing it up to the current date. Bill Jeffrey provided information for the historical perspective on marketing and distributive education.

Acknowledgement of gratitude also goes to the Advisory Council for the project: Melissa Briscoe, Dwight Cline, Jack Corwin, Gerald

Lunney, Jim Wilds, and Arnold Wilson

In the final stages of the project, working committees were formed and called together to review the data. We are most grateful to them. They were: Ron Baugh, Charles Bright, Melissa Briscoe, Dwight Cline, Jack Corwin, Jeannette Downey, Nancy Duncan, Jerry Eades, Jewell Deene Ellis, Sandra Houston, Bill Jeffrey, Jane Kelly, Rodney Kelley, Gerald Lunney, Ed Murphy, Danny O'Neal, Neil Steigelmeyer, Ann Vescio, and Jim Wilds.

Many thanks go to Julia Fleming, Lena Jones, Anne Mills, and Jo Omvig, the patient secretaries who typed the material.

And finally, many thanks go to Clayton Omvig, Head of the Department of Vocational Education at the University of Kentucky, who supervised and guided throughout the entire project.

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CHAPTER 1

INTRODUCTION

Recent years have been witness to many changes in vocational education and vocational teacher education in Kentucky. A number of new vocational schools were built, and new programs were opened. Then, after a period of growth, the expansion came to a halt. Additionally, a growing and legislated emphasis on "academics" reduced the amount of time students had available for vocational education. During this period, the teacher turnover rate also declined, due partly to increases in salary and also due to fewer jobs available. All of these factors, and more, contributed to a decline in the numbers of new vocational teachers needed each year.

During the late 1960's and early 1970's changes were also occuring in vocational teacher education. Partly in answer to an earlier student increase, teacher education programs had been proliferating across Kentucky, increasing in number from one or few per program area to as many as eight or more teacher education programs serving one program area. In many cases, the numbers of teacher education faculty in a single program area did not measurably increase statewide as the number of programs increased. As a result, the faculty changed from being focused in one or two locations to being spread more thinly across the state. By the mid-1980's, vocational teacher educaton in Kentucky was carried out by many small programs with few faculty members and few students in each program.

Presently vocational teacher educators find themselves confronted with multiple teacher education programs for which the need is declining. Despite the progression of teachers through the certification ranks and degree programs, there appears to be less demand for the products of vocational teacher education and less money for its funding. This has led vocational educators to seek ways to increase cost effectiveness, e.g., faculty vacancies have gone unfilled; individual programs have been dropped. At the same time there still remain a number of small teacher education programs.

In an effort to examine the overall problem of teacher education programs, as well as to get some picture of the numbers of teachers and their needs, the Office of Vocational Education commissioned the teacher education project. The project was undertaken as a means of providing data to help vocational educators to more effectively use the resources available in planning and providing vocational teacher education for the State of Kentucky.

Background

One means of making programs more effective and efficient involves projection of future needs, examining resources that might be used to meet those needs, and determining ways to most effectively allocate those resources. Current information is an essential part of such a decision-making process. In an effort to gather such information for Kentucky vocatonal educaton, the Kentucky Office of Vocational Education funded the Department of Vocational Education at the University of Kentucky to collect state-wide data relating to vocational teachers and vocational teacher education.

The intent of the project, as stated in the Request for Proposals, was:

"To identify the state-of-the-art on training vocational teachers, the number of vocational teachers currently employed in each occupational area, and the projected needs for a 5-10 year period. Projected need may be based on turnover for the past 5 years, changes in business and industry, and needs for additional programs at the secondary, adult, and postsecondary levels, and the number currently available but unemployed. Also, the projected number of institutions needed to train teachers by occupational area."

The lack of adequate, up-to-date, accessible information became clear as the project progressed. Space limitations had prevented storing some previously collected data. Other data existed in individual teacher folders, but could not practically be gleaned for statistical use. Earlier studies of various aspects of education were reported to exist but could not be found.

An informal survey of selected teacher education programs in other states revealed a similar situation existing elsewhere. While some states did report some type of organized data collection system, many did not. One teacher educator even commented that he suspected that organized and ongoing data collection was dropped in his state because it was "too revealing."

The literature reflected a similar lack of research or analysis in vocational teacher education or vocational teacher supply and demand. And of the few pertinent studies or projects, most were done at a time when the focus was on seeking ways to meet increasing development needs of teachers. Some of the studies were done to determine the areas in which more teachers needed to be trained. The assumption generally was that money was available for worthwhile programs.

Then came the late 1970's and early 1980's. Suddenly there were more teachers than there were teaching positions. Teacher turnover rates dropped from ten percent to three percent or lower. Fewer teachers were needed, and fewer college students went into teaching. Funds were cut back all over education. Vocational teacher education faculties all across the nation found themselves, along with other areas of education, with less money and experiencing a need to find ways to economize or become more cost effective.

The tone of the literature changed. While few studies or projects have been reported recently, the trend is to studies addressing problems of finding ways to meet basic needs with reduced funding instead of looking for additional ways to meet increasing needs.

Purposes and Objectives

The primary purposes of this project were to analyze vocational teacher education in Kentucky in terms of its production and capabilities and to examine the supply and demand situation for vocational teachers in Kentucky schools. In order to accomplish this, the following major objectives were defined:

1. To identify the present state of Kentucky vocational teacher education programs.
2. To determine the present and past output of vocational teacher education programs.
3. To project the potential output of vocational teacher education in the near future.
4. To identify the present supply of vocational teachers in Kentucky.
5. To project the potential demand for vocational teachers in Kentucky in the various program areas.
6. To develop a profile of vocational teachers in each program area and in each vocational region.

Each of these objectives reflected a number of facets of the study. For example, to meet objective five, "To project the potential demand for vocational teachers in Kentucky in the various program areas," several areas were explored:

Recent teacher new hire rates
Present age and experience of teachers
Regional directors' expectations of regional needs

Even when supplied with that information, such projections remain speculative and, like all trend projections, must not be taken as established fact.

Procedures

The project was conducted by a part-time coordinator under the direction of the Head of the Department of Vocational Education at the University of Kentucky. Direction and funding were provided by the Kentucky Office of Vocational Education.

An advisory council was formed to give further direction, as well as to assist in formulating final recommendations. The council included:

Melissa Briscoe, Director, Division of Program Services, Office of Vocational Education
Dwight Cline, Teacher Educator, Western Kentucky University
Jack Corwin, Director, Vocational Region 7
Gerald Lunney, Associate Director, Council of Independent Colleges and Universities
Jim Wilds, Teacher, Woodford County
Arnold Wilson, Personnel Development Program Manager, Office of Vocational Education

Data reported in the survey were gathered from a number of sources:

1. Vocational teacher educators at all the state universities were surveyed. Instruments developed by the project coordinator were sent to them via their representative on the Office of Vocational Education-University Coordinating Council, by their department heads, or by their vocational coordinator. The project coordinator then visited the universities and collected the instruments personally from the vocational coordinator or head. The department head/coordinator/representative also completed an instrument and was interviewed regarding various aspects of vocational education. (See Appendices E, F, G, and H for survey materials.)

2. An informal questionnaire was sent to representatives of the nation-wide University Council for Vocational Education, as well as to selected other programs. Nineteen forms were mailed; fifteen responses were received. (See Appendix I for survey materials.)

3. A Vocational Teacher Data Form was devised, field tested, and distributed to all Kentucky state-employed vocational teachers via regional directors. Over 1100 were returned. (See Appendices C and D for VTDF and instructions.)

4. Each of the 14 regional directors completed a questionnaire. (Appendices A and B.)

5. Computer analysis of Professional Staff Data Forms (PSDs) provided by the Kentucky Department of Education supplied data on reimbursed vocational teachers in local school districts.

6. Department of Vocational Education computer records, reports, and working papers supplied some data. Historical data were gleaned from biennial reports of the Superintendent of Public Instruction of Kentucky.

7. Historical accounts of teacher education in the program areas were written at the request of the project staff by various Kentucky vocational educators:

Agricultural Education: Harold R. Binkley
Business and Office Education: David McMurtry
Distributive Education: assistance provided by Bill Jeffrey
Home Economics Education: Jewell Deene Ellis
Health Occupations: L.C. and Doris McDowell with assistance from Jane Kelly, Dorothy Ray, and Dr. Norma Jean Schira.

After the data were collected and compiled, committees were formed to review material regarding each of the occupational areas involved in vocational teacher education. To aid in this, the committees formed consisted of three to five individuals. The Office of Vocational Education program manager or a consultant from each of the occupational areas was included. All project advisory council members who were available on one of the scheduled meeting days were assigned to an area. Secondary teachers and administrators as well as a vocational school administrator were included, along with regional directors and a regional program coordinator. Teacher educators were not included, except in the case of advisory council members.

The program area committees spent much of a day working together reviewing the material. Their input has been presented to the Office of Vocational Education for consideration.

CHAPTER 2

DETERMINATION OF TEACHER DEMAND

The study of supply and demand of personnel has occupied people in many professions. Educators have been no exception. A survey of the literature in past years revealed a number of studies of teacher supply and demand.

One means of examining and estimating supply and demand is through the use of a model. Such a model should be seen not as an absolute mathematical formula, but as a way of guiding the investigation by illustrating the relationships of the various parts — factors that add to or detract from the supply of teachers, for example. By reducing the study of supply and demand to a collection of factors, one can then see more easily what data needs to be acquired.

Figure 1 presents such a model. Adapted from similar models (Gray and others, 1979; Temme and Zeigler, Jr., 1980; and Thomas and Boyett, 1976,) it is designed to take into account the factors which most commonly influence teacher supply and demand.

This model assumes a given number of teacher positions in year X, with the operation of the factors resulting in the number of new teachers needed in the following year, or year X + 1.

The components of the model were defined as follows:

a. Change in demand due to student-teacher ratio changes is the number of teaching positions to be added or deleted based on changes in the ratio of numbers of students to numbers of teachers. The ratio may or may not change from year to year. Political decisions may influence this ratio, as when the legislature decrees smaller class sizes.

b. Changes in demand due to projected enrollment changes (including new programs) is the number of teaching positions added or deleted to meet expected increased or decreased student enrollments in the next year. These enrollment changes may be due to increases or decreases in the age cohort or in the numbers of students enrolling in vocational education as well as to addition or closing of specific programs.

c. Replacements required due to attrition rate is the number of new teachers needed to refill vacancies that occur due to death, retirement, and job change.

d. Pool of available "unemployed" certified teachers is the

A

[[a]Changes in demand due to student-teacher ratio change +/- [b]changes in demand due to projected enrollment changes (including new programs) + [c]Replacements required due to attrition rate: -death
-retirement
-job change] - [d]Pool of available unemployed certified teachers = [e]New teachers needed in year X + 1

B

[f]Output of teacher education programs - [g]Certified graduates who choose other jobs = [h]Teacher education supply of new teachers

Figure 1

Teacher Supply and Demand Model

total number of teachers with appropriate certification who are not presently teaching but who are interested and available for a teaching job. A key word in this factor is "available." At present no clear method exists for determining how many qualified people there are who are not teaching but who would be available. Kentucky teacher certification records do not keep track of whether or not an individual is in the job market, has moved out of the state, has taken another job with no intent of teaching, has gone into full time homemaking, or has died.

e. New teachers needed in year X + 1 is the number of new teachers needed to fill position vacancies which arise as a result of factors a, b, and c, and which are not being filled by teachers from factor d.

f. Output of teacher education programs is the number of newly graduated certified teachers entering the job market. Because health and personal services teachers and industrial education level III teachers generally are already employed before entering teacher education programs, they are not included here.

g. Certified graduates who choose other jobs are the students who earn teacher certification but who leave the pool of potential teachers. They take other positions with no current plans to seek teaching jobs. Careful follow-up of each student is needed to determine this number.

h. Teacher education supply of new teachers is the number of newly certified individuals who are available to take teaching positions. These represent the new additions to the teacher pool. This results from computation of factor f minus factor g.

In an ideally balanced system, factor e would either match factor h or be slightly less than h. Theoretically, this would assure an adequate supply of teachers while avoiding a glut on the job market. New graduates could feel reasonably assured of finding a job.

When factor h is larger than factor e, some problems arise. New graduates have real uncertainty about finding jobs. The public raises questions about funding teacher education programs to train teachers for whom there are no positions. At the same time, training excessive numbers of teachers provides a wide selection from which schools may choose. Theoretically, the competition should improve the quality of teachers hired. At the same time, a certain proportion of the graduates can be expected to enter other fields, regardless of the job market. For this reason, factor h generally should be somewhat larger than factor e.

While the model applies to most areas of teacher supply, including some program areas in vocational education, it does not directly apply to health and personal services teachers, industrial education level III teachers, some technical instructors, or a few individuals in other vocational areas. Since these individuals enter teaching directly from industry and their trade or profession, the potential consists of all qualified, interested professionals in those areas and is, therefore, quite difficult to estimate.

The factors and logic involved in this model influenced the design of the teacher education project. While some data, such as the number of available unemployed teachers (factor d), are presently unobtainable, data was collected to satisfy the demands of other factors. It is this data which is presented in the body of the report. The model can then be generally applied to the data by the project advisory committee or state department personnel as they review the findings, draw conclusions, and make recommendations.

CHAPTER 3

STATUS OF VOCATIONAL TEACHERS AND TEACHER EDUCATION

Vocational education covers a wide range of service areas. This report provides information on that range of areas in regard to the status of both vocational teachers and of teacher education. A great deal of information has been amassed so that this report may serve as a resource for future planning by vocational education administrators in the regions and at the state level, as well as by teacher educators in the universities.

Depending on one's purpose, the reader may read this section in one of several ways. A person interested in an outlook on vocational teachers and teacher education in general may find the overall summary section most useful. Summary tables showing data from all the program areas are found in this section. General information on teacher education, regardless of service area, is also found in this section. A person interested in a particular service area, however, may prefer to skim the overall summary and move on to the data for that particular area.

Procedures and Limitations

Regardless of the reader's purpose, some procedures and limitations regarding various phases of the study should be noted. Vocational teacher data came from two main sources. Data on reimbursed teachers in local school districts came from computer print-outs of data taken from Professional Staff Data Forms (PSDs) completed by all teachers in local school districts at the beginning of the 1984-85 school year and supplied by the Department of Education.

These data represent a head count of teachers who were teaching in a program area full-time, or at least for more time than in any other area. If, for example, a teacher was teaching 3 hours of home economics and 2 hours of science, that teacher was probably listed as a home economics teacher. If the reverse was true, however, with 3 hours of science and 2 hours of home economics, the teacher was listed as a science teacher with no indication of home economics. As a result, when program consultants were asked about teacher numbers, their totals sometimes differed considerably from PSD records.

Since this report was being done partly to establish some data on the total teacher pool, it was decided that the total teacher count should reflect the highest numbers of teachers reported, usually those numbers supplied by the program consultants from their teacher lists. At the same time, any further data about those teachers could only be reported for the subjects included in the PSD data. Therefore, some tables include a category of "Unknown" which represents the teachers known to be teaching but not covered by the surveys.

The same limitation is true of data regarding state-employed teachers. The total count of state-employed teachers was compiled from three sources: reports of regional directors; the Vocational Teacher Data Form (VTDF) survey which was an attempt to reach all full-time, state-employed vocational teachers; and the numbers given by state program consultants. Due to its nature as a survey, it was recognized that VTDF data would probably report most but not all of the teachers. Again, the decision was made to base the total count of teachers on the highest reasonably substantiated number for each region. And, as with reimbursed teachers, a category of "Unknown" then included the persons known to be teaching but not picked up on the VTDF data reports.

Because of these limitations then, while the total teacher count represents as nearly as can be determined the actual number of practicing teachers in each subject area and region, data analysis was only available on a portion of that teacher cohort. In some cases, such as agriculture, data were available on most of the group. In other cases, such as distributive education, the "Unknown" consisted of as much as 37% of the total.

Besides these limitations, there remains the ever-constant problem of survey questions being interpreted in some manner other than what was intended. PSD forms have been used annually for some years and, presumably, teachers and principals are familiar with them. However, the VTDF was new to teachers and administrators. Despite previous field testing and subsequent changes, examination of completed VTDF surveys led researchers to suspect that teachers may have viewed some terminology differently than was intended. For example, the "5th year" program referred to a fifth year of education following a bachelor's degree and in lieu of a master's degree. However, it appeared that a few teachers took "5th year" to indicate a 64-hour industrial education certificate. When possible, questionable responses were clarified. In some cases, questionable responses were dropped.

The teacher education portion of the report is based on data gathered from each university. Program heads and their colleagues spent considerable time compiling the data. Some of the information goes back five years. Some of the questions asked for data that, while reasonably current, was not readily available. As a result, some responses were based, no doubt, on memory or incomplete records, while other responses were based on excellent, up-to-date records.

As indicated in various sections of the report, some vocational teachers receive part or all of their training at independent colleges in Kentucky. Recognizing this, an abbreviated survey was sent to the independent colleges known to be involved in vocational teacher education in some way. Some schools did not respond and, therefore, the data presented later in this report is incomplete to that extent.

At the same time, however, teachers indicated where they earned degrees, thereby providing some information on the role of the independents. This data is presented in a category labeled "Other Schools: In-State" along with data on the state universities.

Vocational Education Summary Data

Vocational education has grown immensely since the early days following passage of the Smith-Hughes Act. In 1917-1918 a core of 652 Kentucky high school students studied agriculture, home economics, and trade and industry. From that beginning, Kentucky vocational education grew to serve at least 293,475 students during 1984-85 in a range of occupational subject areas (Table 1.)

The enrollment history of Kentucky vocational education reflects society's crises as the male-oriented programs showed a decline when students and teachers marched off to World War II, and then an increase as veterans returned, eager for training. Programs specifically for veterans helped swell enrollments in those post-war years.

Employment and legislative trends are reflected also in the addition of new programs and rearrangement of existing areas. For example, the George Deen Act of 1936 authorized the official establishment of marketing and distributive education. Restructuring of the Bureau of Vocational Education became necessary following the Vocational Education Act of 1963. Business and Office Education became a division in 1965. Programs were added or dropped as needs arose and declined.

Vocational Teachers

Numbers of Teachers

Over the years, the number of vocational teachers in Kentucky has grown to where at least 3,667 teachers were teaching various vocational subject areas in local school districts, state-operated programs, and correctional institutions during 1984-85 (Table 2). Types of teachers (reimbursed and state-employed) were combined and numbers then presented by program area for each of the fourteen vocational regions in Table 3. The largest overall group of vocational teachers in Kentucky was in business and office education, with industrial education level III close behind. Examination of Table 2 reveals that teachers were not distributed equally between reimbursed programs and state-operated programs. Some areas had the

Table 1

Kentucky Vocational Education
Enrollments by Vocational Areas (All Levels)

Year	Agriculture	Business and Office	Distributive Education	Consumer Home Economics	Gainful Home Economics	Health Education	Trade and Industry	Technical	Industrial Education I and II	Special Programs	Practical Arts	Public Service
1917-18	171			344			137					
1918-19	785			929			491					
1919-20	1,004			774			654					
1920-21	1,040			1,471			730					
1921-22	1,285			1,100			900					
1922-23	1,877			755			675					
1923-24	1,996			793			831					
1924-25	2,799			850			841					
1925-26	3,126			875			620					
1926-27	3,457			1,236			1,013					
1927-28	3,603			921			1,423					
1928-29	3,890			1,229			2,614					
1929-30												
1930-31												
1931-32	3,889											
1932-33	3,909			2,276			3,164					
1933-34	6,550			2,251								
1934-35												
1935-36	6,166			4,075			2,924					
1936-37	6,914			4,305			3,130					
1937-38	9,205		163	7,411			3,798					
1938-39	11,271		842	10,704			5,025					
1939-40	13,294		1,188	13,803			5,977					
1940-41	14,868		2,350	16,225			7,161					
1941-42	6,365		3,660	16,471			6,268					
1942-43	11,631[1]		7,125	15,331			4,508					
1943-44	11,142		11,240	14,376			4,365					
1944-45	9,655		7,958	15,399			4,617					
1945-46	11,722		9,508	14,780			5,337					
1946-47	13,036		10,157	15,983			9,916					
1947-48	25,522[2]		11,331	27,501[3]			6,972					
1948-49	30,009		10,119	31,462[4]			8,821					
1949-50	33,875		7,308	29,661			8,055					
1950-51	30,488			26,266			9,293[5]					
1951-52	24,161		[5]	25,251			11,677[5]					
1952-53	21,813		[5]	26,108			11,127[5]					
1953-54	20,479		[5]	26,028			13,278[5]					
1954-55	20,637		[5]	28,968			11,290[5]					
1955-56	19,473		[5]	30,342			14,643[5]					
1956-57	18,803		[5]	32,692			14,281[5]					
1957-58	19,155		2,701	31,800		765	10,254					
1958-59	19,006		2,488	31,436		534	9,336					
1959-60	18,191		3,431	29,388		389	9,665					
1960-61	19,743		2,690	31,919		462	10,701					
1961-62	19,180		2,690	33,392		396	10,992	579				
1962-63	20,503		2,304	34,905		818	20,061	633				
1963-64	19,109		2,438	37,398		967	19,072	829				
1964-65	18,030		3,312	37,984		968	20,283	967				
1965-66	19,263	6,921	4,007	37,098	273	751	22,277	1,071				
1966-67	17,459	8,049	5,002	39,298	326	827	22,615	4,529				
1967-68	17,435	9,929	4,258	42,561	364	1,383	34,428	1,046		21		
1968-69	17,973	12,006	9,398	45,151	1,033	2,153	30,608	1,015		338		
1969-70	18,210	14,730	8,495	47,795	847	2,453	30,601	1,079		1,361		
1970-71	19,316	19,713	9,713	49,539	1,646	2,508	35,977	1,143		13,185		
1971-72	20,190	23,219	11,943	51,131	2,097	3,325	36,625	1,252		19,249		
1972-73	21,829	25,745	9,817	61,821	2,763	4,008	36,620					6,677
1973-74	21,812	26,186	11,387	64,458	3,209	5,163	31,668	1,150		29,090		
1974-75	22,104	31,290	11,948	79,435	2,907	5,608	36,130	1,241		37,207		
1975-76	22,888	28,538	14,326	90,502	3,619	4,987	40,094	1,023		41,868	9,177	11,088
1976-77	23,807	34,324	13,734	80,456	3,369	6,713	51,679			46,491	19,165	17,242
1977-78	22,909	33,416	12,416	76,531	3,969	5,819	30,348			41,386	20,000+	30,701
1978-79	24,173	33,541	13,042	84,000	3,982	6,340	33,113	605	9,135	44,373	24,910	32,303
1979-80	22,431	33,271	12,426	67,491	3,476	9,385	36,810	1,119	11,809	15,045	44,065	40,445
1980-81	21,689	33,884	11,284	69,055	3,024	9,400	39,141	1,086	16,192	14,573	47,311	43,841
1981-82	22,450	34,450	10,431	73,871	3,522	9,693	38,832	1,159	16,447	13,546	48,393	53,439
1982-83	21,185	41,531	11,061	70,012	3,594	10,373	41,378	824	20,008	11,686	49,203	52,799
1983-84	21,106	52,632	8,063	65,930	3,577	10,616	40,440	408	20,238	11,244	47,937	39,795
1984-85[6]	18,711	37,354	8,462	50,751	3,347	9,517	40,963	538	18,777	7,785	35,360	41,910

NOTES:

1. Number of departments decreased from 260 to 199 due to loss of teachers.
2. Veterans' program added.
3. Figures include 11,225 enrollees in Food Conservation Adult courses
4. Figures include 14,673 enrollees in Food Conservation Adult courses.
5. Enrollment figures for Distributive Education and Trade and Industry combined in Biennial Reports.
6. Academic Vocational, an extra category, reported 626 students.

Table 2

Numbers of Kentucky Vocational Teachers by Program Title and Type of Teacher in 1984-1985

Program Title	Type of Teacher Reimbursed	 State-Employed	Total
Agriculture	256	23	279
Business & Office	763	166	929
Distributive Education	107	28	135
Health & Personal Services	26	202	228
Home Economics	521	33	554
Industrial Arts	81	0	81
Industrial Education Level I	40	0	40
Industrial Education Level II	190	0	190
Industrial Education Level III	182	718	900
Special Vocational Programs	133	64	197
Public Service	0	14	14
Practical Arts	106	0	106
Other	0	14	14
Total	2405	1262	3667

Table 3

Summary of Kentucky 1984-85 Vocational Teachers by Program Area and Region

Program Area	Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Agriculture	24	24	20	29	21	17	12	26	7	8	6	16	26	43	279
Business & Office	44	59	41	51	53	173	103	33	40	65	27	80	43	117	929
Distributive Education	12	10	4	12	9	27	10	3	3	8	8	8	7	14	135
Health & Personal Services	25	23	9	17	5	36	19	8	9	11	12	20	9	25	228
Home Economics	36	42	33	42	33	71	49	27	27	30	21	42	30	71	554
Industrial Arts	4	10	5	7	1	11	8	1	1	3	1	7	0	22	81
Industrial Education															
Level I	0	1	2	0	2	1	7	2	3	0	2	4	2	14	40
Level II	10	7	17	9	17	33	26	9	5	5	5	6	11	30	190
Level III	60	53	37	61	56	150	72	37	62	57	55	77	44	77	900
Special Vocational Programs	13	8	8	9	10	52	21	8	4	15	4	15	6	24	197
Public Service	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Practical Arts	3	1	4	11	4	25	12	4	3	9	2	9	3	16	106
Other	0	0	1	3	0	4	0	0	2	2	0	1	0	1	14
Total	232	239	182	252	212	601	340	159	167	216	144	286	182	455	3667

larger proportion of their teachers in reimbursed programs, while the areas of health and personal services and industrial education level III were concentrated most heavily in state-operated programs.

As shown in Table 4, five-year data on numbers of vocational teachers in the various program areas reveal a general trend downward, with the exception of business and office education, health and personal service occupations, and industrial education level I. One reason for the apparent increase in business and office education was the shifting of programs from non-reimbursed to reimbursed status. (See the program area section on business and office teachers.)

It must be noted that these numbers were taken from PSD data and regional director surveys, the only sources of five years of comparable data. Other teachers who were not picked up by one of these two sources would not be included in this tabulation, even though they were counted for the report in Table 2.

Age and Experience

A summary of average age is presented in Table 5 along with average years of experience of teachers in each program area. It can be noted that in program areas where the usual employment pattern is a period of technical training and experience before entering teaching (industrial education level III and health and personal services) the average age is a few years higher and the average years of experience a few years lower than that of other areas.

Even more pertinent, when attempting to arrive at some estimate of the future need for teachers, is an estimate of numbers of teachers old enough or with enough years of teaching to be considering retirement. While more specific data are provided in each subject matter section, a summary reflecting potential retirements in the near future based on age and years of experience is provided in Table 6.

Teacher Turnover

Each year a number of teachers are lost to the profession through various forms of attrition. Death, retirement, job change, and out-of-state migration all take their toll on the teacher pool. While some of these factors are not easily determined, the data used in this study did provide statistics on one factor, the "new hire rate."

"New hires," in this report, refer to the number of teachers who indicated they were in their first year of teaching. It is a reflection of the practical issue of how many new teachers were hired into the pool of employed teachers. The numbers of new hires were obtained from the PSD forms for local school district or reimbursed teachers and from VTD forms for state-employed teachers. The "new hire rate," then, is the proportion of teachers who reported they were

Table 4

Summary of Numbers of Vocational Teachers in all
Program Areas: 1980-81 to 1984-85

Year	Program Areas									
	Agriculture	Business and Office	Distributive Education	Health and Personal Services	Home Economics	Industrial Arts	Industrial Education Level I	Industrial Education Level II	Industrial Education Level III	Special Vocational
1980-81	304	737	140	218	585	135	19	192	902	178
1981-82	295	730	123	224	573	106	25	202	891	159
1982-83	285	800	113	229	545	98	30	200	874	158
1983-84	288	924	85	230	555	86	31	204	867	160
1984-85	276	924	83	226	537	81	40	190	873	171
Cumulative % change from 1980-81 to 1984-85	-9.2%	+25.4%	-40.7%	+3.7%	-8.2%	-40.0%	+110.5	-1.0%	-3.2%	-3.9%

Taken from PSD data and regional director surveys, Does not include any teachers not picked up by PSD data or regional director surveys. Therefore, these figures are of interest when compared within the table, but do not reflect an accurate total for those years.

Table 5

Summary of Average Age and Years of Experience for Kentucky 1984-85 Vocational Teachers

Service Area	Average Age	Average Years of Experience
Agriculture	36.1	11.9
Business & Office	39.8	13.8
Distributive Education	38.1	11.4
Health & Personal Services	43.4	9.8
Home Economics	39.8	14.7
Industrial Arts	38.0	13.0
Industrial Education, Level I	36.0	11.0
Industrial Education, Level II	37.0	12.0
Industrial Education, Level III	43.6	10.2
Special Vocational Education	41.3	12.5

Table 6

Summary of Potential Retirements Based on Age and Years of Experience

	PROGRAM AREAS									
	Agriculture	Business and Office	Distributive Education	Health and Personal Services	Home Economics	Industrial Arts	Industrial Education I	Industrial Education II	Industrial Education III	Special Vocational
Teachers aged 56 or older	15	56	6	28	41	3	1	5	143	8
Teachers with 25 or more years of experience	31	103	6	2	64	8	1	16	27	7

in their first year of teaching.

New hire rates for 1984-85 are summarized in Table 7. Ranging in 1984-85 from a new hire rate of 1.3% in home economics to a new hire rate of 6.1% in health and personal service occupations, the figures reflect a low turnover rate in many areas of vocational teaching. As of 1984-85 certain areas in vocational education (notably home economics education, special vocational education, and agriculture) with new hire rates of less than 2.0% reflected an especially low turnover rate.

Data in Table 8 reflect the new hire rate trends in each reimbursed program area over the past five years. Comparable figures for state-employed teachers over those years were not available.

Rank

Rank attainments are shown in Table 9. Overall, 25.9%, or one-fourth of all vocational teachers, held a Rank I certificate, and almost half (47.7%) held a Rank II certificate. Because two different ranking systems are in operation, depending on the service areas, overall rank figures cannot be interpreted in terms of academic degrees completed.

Highest or Most Recent Degree

A summary of where 1984-85 Kentucky vocational teachers received their highest or most recently completed degree or certificate is presented in Table 10. A grand total for each university is included, although it must be qualified with the reminder that each university offers a different selection of programs. Institutional data for a particular service area in this table as well as in the section for each service area is, perhaps, more meaningful.

Present Enrollment of State-Employed Teachers in Higher Education

State-employed teachers were asked to report if they were presently enrolled in higher education, and if so, where. Out of a total of 1234 teachers, 606 gave no response, presumably indicating that they were not enrolled in higher education (Table 11.) Of the rest who reported being enrolled somewhere, the largest group (112 or 9.1%) was enrolled at Eastern Kentucky University. The largest share of these teachers were industrial education level III teachers, which reflects the fact they they also comprised a large portion of the state-employed teacher group. Close examination of this table and data in the narrative about each service area, will give some indication of how enrollments are distributed in each service area.

Table 7

Summary of New Hire Rates for Kentucky 1984-85 Vocational Teachers

Service Area	Total Teachers	New Hires	% or "New Hire Rate"
Agriculture	279	5	1.8
Business & Office	929	24	2.6
Distributive Education	135	7	5.2
Health & Personal Services	228	14	6.1
Home Economics	554	7	1.3
Industrial Arts	81	4	4.9
Industrial Education Level I	40	2	5.0
Industrial Education Level II	190	10	5.3
Industrial Education Level III	900	42	4.7
Special Vocational Education	197	3	1.5
Total	3533	118	3.3

Table 8

Summary of New Hire Rates for Reimbursed Teachers
1980-81 - 1984-85

Year	Program Areas									
	Agriculture	Business and Office	Distributive Education	Health and Personal Services	Home Economics	Industrial Arts	Industrial Education I	Industrial Education II	Industrial Education III	Special Vocational
1980-81	3.7	1.6	3.3	0.0	2.2	9.6	0.0	4.2	1.2	3.5
1981-82	4.1	1.1	2.7	4.8	1.5	6.6	4.0	2.0	1.7	1.6
1982-83	5.3	2.3	1.0	0.0	1.6	1.0	0.0	5.0	1.7	0.8
1983-84	2.3	2.0	1.5	0.0	1.7	3.5	6.5	2.5	1.7	0.8
1984-85	2.0	2.1	3.0	0.0	1.0	4.9	5.0	5.3	2.2	1.5

Table 9

Summary of Rank Distribution of Kentucky 1984-85 Vocational Teachers

Service Area	Rank I Teachers	Rank I %	Rank II Teachers	Rank II %	Rank III Teachers	Rank III %	Unknown Teachers	Unknown %	Total Teachers
Agriculture	119	42.7	123	44.1	35	12.6	2	0.7	279
Business & Office	237	25.5	478	51.5	197	21.2	17	1.8	929
Distrubutive Ed.	31	23.0	35	25.9	19	14.1	50	37.0	135
Health & Personal Services	79	34.7	82	36.0	41	18.0	26	11.4	228
Home Economics	125	22.6	291	52.5	116	20.9	22	4.0	554
Industrial Arts	18	22.2	43	53.1	20	24.7	0	0.0	81
Industrial Education Level I	10	25.0	22	55.0	8	20.0	0	0.0	40
Industrial Education Level II	43	22.6	105	55.3	42	22.1	0	0.0	190
Industrial Education Level III	187	20.8	418	46.4	226	25.1	69	7.7	990
Special Vocational Education	67	34.0	87	44.2	30	15.2	13	6.0	197
State Totals/ Averages	916	25.9	1684	47.7	734	20.8	199	5.6	3533

Table 10

Summary of Distribution of Institutions Where Kentucky Vocational Teachers Received Their Highest or Most Recently Completed Degree or Certificate, 1984-85

Institution	Agriculture		Business & Office		Distrib. Educ.		Hlth. & Pers. Serv.		Home Ec.		Ind. Arts		Ind. Ed. Lev. I		Ind. Ed. Lev. II		Ind. Ed. Lev. III		Spec. Voc. Ed.		Total
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Eastern Ky. University	13	4.7	158	17.0	5	3.7	32	14.0	94	17.0	31	38.3	21	52.5	71	37.4	110	12.2	37	18.8	572
Ky. State University	1	0.4	10	1.1	0	0.0	0	0.0	3	0.5	1	1.2	0	0.0	1	0.5	1	0.1	0	0.0	17
Morehead State University	28	10.1	121	13.0	4	3.0	8	3.5	79	14.2	9	11.1	5	12.5	21	11.0	72	8.0	17	8.6	364
Murray State University	48	17.2	95	10.2	17	12.6	36	15.8	73	13.2	13	16.1	3	7.5	26	13.7	132	14.7	20	10.2	463
Northern Ky. University	0	0.0	33	3.6	6	4.4	9	4.0	6	1.1	3	3.7	3	7.5	4	2.1	28	3.1	4	2.0	96
University of Kentucky	127	45.7	96	10.3	12	8.9	15	6.6	83	15.0	2	2.5	0	0.0	0	0.0	55	6.1	17	8.6	407
University of Louisville	2	0.7	57	6.1	1	0.7	16	7.0	14	2.5	1	1.2	0	0.0	4	2.1	39	4.3	8	4.1	142
Western Ky. University	54	19.4	166	17.9	19	14.1	16	7.0	115	20.7	16	19.8	3	7.5	49	25.8	85	9.4	39	19.8	562
Other, In-State	1	0.4	113	12.2	8	5.9	20	8.8	43	7.8	1	1.2	1	2.5	4	2.1	14	1.6	19	9.6	224
Out-of-State	4	1.4	61	6.6	9	6.7	17	7.5	22	4.0	3	3.7	4	10.0	10	5.3	14	1.6	22	11.2	166
No Response/Degree	0	0.0	5	0.5	0	0.0	37	16.2	0	0.0	1	1.2	0	0.0	0	0.0	289	32.1	0	0.0	332
Unknown	0	0.0	14	1.5	54	40.0	22	9.6	22	4.0	0	0.0	0	0.0	0	0.0	61	6.9	14	7.1	187
Total	278	100.0	929	100.0	135	100.0	228	100.0	554	100.0	81	100.0	40	100.0	190	100.0	900	100.	197	100.0	3,532

Table 11

Summary of Institutions Where State-Employed Kentucky Vocational Teachers were Presently Enrolled in Higher Education in 1984-85

Institution	Program Areas							Total	
	Ag	B&O	D.E.	Health & Pers. Serv.	Home Econ.	Ind. Ed.	Spec. Voc.	n	%
Eastern Kentucky University	0	4	0	14	1	90	3	112	9.1
Kentucky State University	0	0	0	0	0	0	0	0	0.0
Morehead State University	1	8	1	8	3	61	3	85	6.9
Murray State University	4	9	1	18	4	50	3	89	7.2
Northern Kentucky University	0	3	0	6	0	21	2	32	2.6
University of Kentucky	4	3	3	5	3	21	2	41	3.3
University of Louisville	0	1	0	11	0	32	2	46	3.7
Western Kentucky University	1	9	4	11	0	57	0	82	6.6
Other Schools, In-State	1	2	0	5	0	3	2	13	1.1
Other Schools, Out-of-State	0	0	0	3	1	2	0	6	0.5
No Response/ Not Enrolled	11	113	10	99	17	320	36	606	49.1
Unknown	1	14	9	22	4	61	11	122	9.9
Total	23	166	28	202	33	718	64	1234	100.0

Location of First Job in Relation to University Attended

In examining areas served by the various universities, one can also look at where teachers accepted positions after completing their first (usually undergraduate) degree. State-employed teachers were asked about the location of their first teaching job and where they earned their first degree. Answers were then sorted to indicate, first, the numbers of teachers who located their first teaching job reasonably near the university awarding the first degree (either in the same vocational region where the university was located or in one of the regions touching that one); and second, who located jobs in other in-state voctional regions; and, third, those who gave no response or went out of Kentucky for their first job.

Among 22 state-employed teachers of agriculture, 59% located jobs reasonably near the university. Sixty-four percent of the distributive education teachers and 66% of the 29 reporting state-employed home economics teachers located reasonably near the university. Although special vocational teachers are not trained in vocational teacher education programs, they were also asked about first jobs. Eighty-nine percent of the teachers providing complete responses indicated taking first jobs reasonably near the university.

State-employed health and personal service occupations teacchers reported that 85.2% had taken first jobs reasonably near the school awarding the first degree. Interpretation of these responses is somewhat mixed, however, as many of these teachers may have been citing diplomas or degrees in nursing as the first degree. Others may have been indicating a teaching degree earned while commuting and also holding down a teaching job.

Industrial education level III teachers, as a rule, earned their first degrees while also teaching. Of the 355 teachers graduating from state universities, 86.1% were employed reasonably near the school, due, no doubt, to the necessity of going to school near where one works.

Since relatively few agriculture, distributive education, or home economics teachers are state-employed, the results in these areas, while of interest, cannot be considered representative. The business and office program area and industrial education level III have a larger contingent of state-employed teachers and are, therefore, slightly more representative. However, the data all appear to reveal a tendency for vocational teachers to find employment in the general area of the university from which they graduated.

Vocational Teacher Education

Since the earliest days of vocational education, preparation of qualified teachers has been a concern. The 1923 Report of the Superintendent of Public Instruction of Kentucky (p. 16) cites concern with preparing an adequate supply of trained teachers due to "other lines of activities" drawing "so heavily on the supply."

Since the issuance of that report which listed the University of Kentucky and Kentucky Normal and Industrial Institute as the teacher training centers for vocational teachers, vocational teacher education has grown to where all of the eight state universities plus some of the independent colleges play a role in the total effort to train vocational teachers.

Location of Programs

Vocational teacher education programs are defined here as those programs offering methods courses and student teaching leading to vocational teacher certification in that program area. By this definition, then, programs which offer subject matter courses but not the vocational teacher education component are not defined as vocational teacher education. For example, potential vocational agriculture teachers can take subject matter courses and earn a degree in agriculture at Eastern Kentucky University or Berea College but must then enroll elsewhere in one of the four Kentucky vocational agriculture teacher education programs in order to complete certification.

While all of the state universities are involved in vocational teacher education, most of the state universities are involved in teacher education for some but not all of the vocational areas (see Table 12.) The map of Kentucky (Figure 2) illustrates the location of each of the state universities.

Besides the vocational teacher education programs presently offered in the state universities, a few independent colleges are also approved to offer vocational teacher education. Berea College offers industrial arts education, and vocational home economics teacher education is available at both Berea College and Georgetown College. While none of the independent colleges offer vocational business teacher education programs, several offer non-vocational business teacher education (see Note 3, Table 12.) Graduates of these non-vocational business education programs who also meet work experience requirements established by the Office of Vocational Education may apply for vocational certification.

Degrees Offered

The vocational department head or coordinator at each of the state universities was asked to list degrees offered by that

Table 12

Location of Vocational Teacher Education Programs Reported by Kentucky Universities: 1984-85[1]

University	Program Areas						
	Agriculture	Business Education	Distributive Education	Health	Home Economics	Industrial Arts	Vocational Industrial and Technical Edu.
Eastern Kentucky University		X		2	X	X	X
Kentucky State University		X			X	X	
Morehead State University	X	X		2	X	X	X
Murray State University	X	X	X	2	X	X	X
Northern Kentucky University		X		2			X
University of Kentucky	X	X	5	2	X		X
University of Louisville		X	5	X			X
Western Kentucky University	X	X	5	X	X	X	X
Other		3			4	6	

NOTES:

1. Vocational Teacher education programs:
   Those programs offering methods courses and student teaching leading to certification in that program area.

2. Health occupations students seeking vocational education preparation and certification at these schools apply to the industrial education program for course work.

3. Bellamine, Berea, Brescia, Campbellsville, Cumberland, Pikeville and Union colleges offer non-vocational business education program. Graduates who also meet work requirements may apply for vocational certiciation.

4. Berea College, Georgetown College

5. Distributive Education program on University books, but not active. Students seeking DE certification should inquire in the business education office regarding possible options.

6. Berea College.

Location of Kentucky State Universities

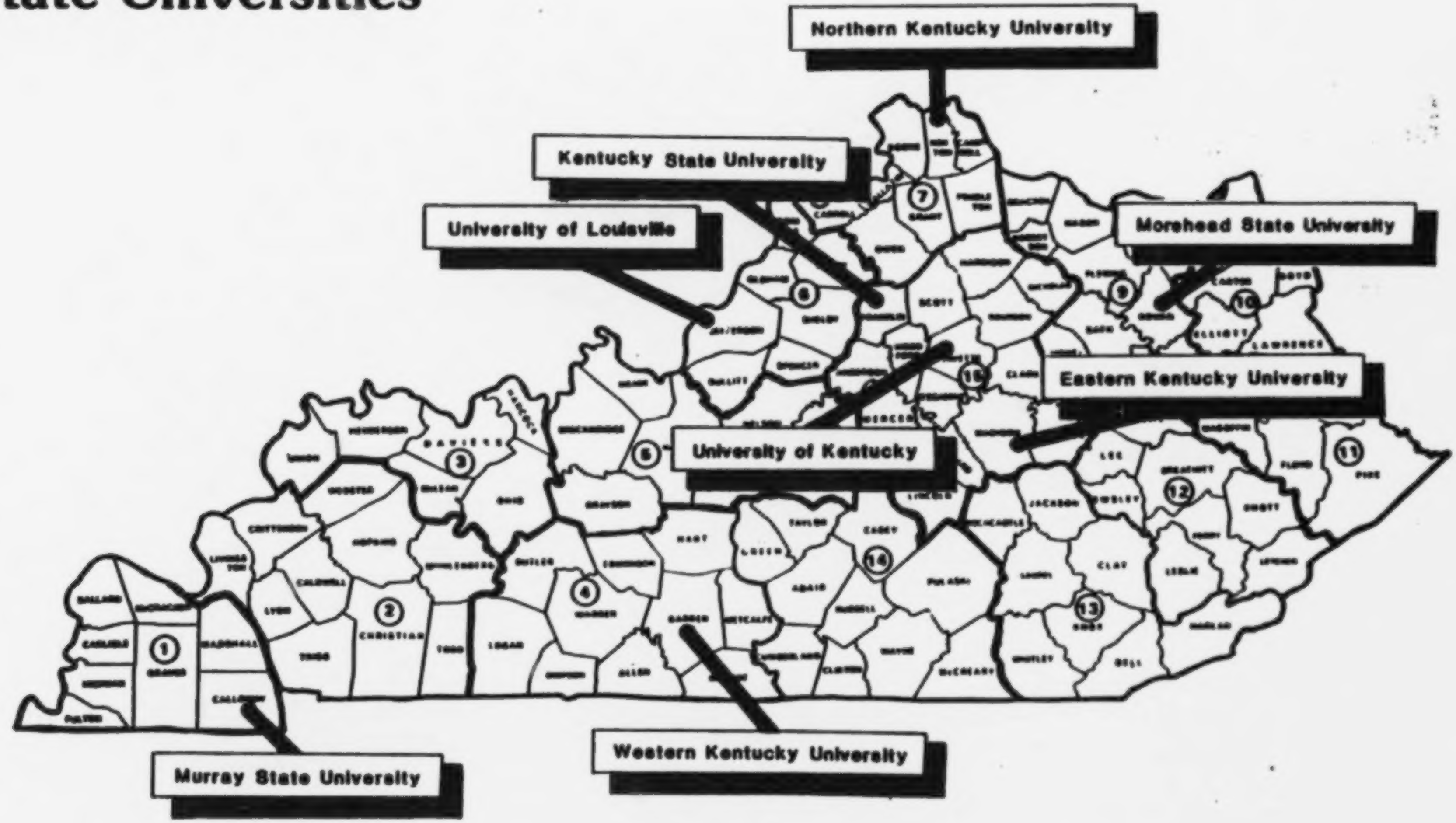
Northern Kentucky University
Kentucky State University
University of Louisville
Morehead State University
Eastern Kentucky University
University of Kentucky
Murray State University
Western Kentucky University
①
②
③
④
⑤
⑥
⑦
⑨
⑩
⑪
⑫
⑬
⑭
⑮
GRAVES
CHRISTIAN
HOPKINS
HENDERSON
DAVIESS
GRAYSON
TAYLOR
CASEY
PULASKI
JACKSON
CLAY
BREATHITT
KNOTT
PIKE
FLOYD
LAWRENCE
ELLIOTT
SCOTT
SHELBY
GRANT

Figure 2

institution in vocational teacher education. Responses follow.

Baccalaureate Degrees.

Eastern Kentucky University

B.S. Degree in Business Education
B.S. Degree in Home Economics Education
B.S. Degree in Industrial Arts Education
B.S. Degree in Vocational-Industrial and Technical Education

Kentucky State University

B.S. Degree in Business Education
B.S. Degree in Home Economics Education
B.S. Degree in Industrial Education (Levels I and II)

Morehead State University

B.S. Degree in Vocational Agriculture Education
B.S. Degree in Vocational Home Economics Education
B.S. Degree in Industrial Education
B.B.A. in Business Administration

Murray State University

B.S. Degree in Agriculture
B.S. Degree in Business
B.S. Degree in Home Economics
B.S. Degree in Vocational-Technical Education
B.S. Degree in Distributive Education

Northern Kentucky University

B.S. Degree in Business Education
B.S. Degree in Industrial Education
B.S. Degree in Industrial Technology

University of Kentucky

B.A. Degree in Education:
    Agriculture Education
    Business Education
    Distributive Education
    Home Economics Education

B.S. Degree in Education:
    Industrial and Technical Education

University of Louisville

B.S. Degree in Business Adminstration
B.S. Degree in Commerce (Distributive Education)
B.S. Degree in Health Occupations Education
B.S. Degree in Occupational Education

Western Kentucky University

B.S. Degree in Agriculture
B.S. Degree in Business and Office Administration
B.S. Degree in Distributive Educaiton
B.S. Degree in Allied Health Education
B.S. Degree in Home Economics Education
B.S. Degree in Industrial Education
B.S. Degree in Industrial Arts

Master's Degrees.

Eastern Kentucky University

M.A. Degree in Education with options in:
    Agriculture
    Business
    Home Economics
    Industrial Arts

M.S.degree in Industrial Education

Morehead State University

M.S. Degree in Vocational Education:
    Agriculture
    Home Economics
    Industrial Education

Master of Business Administration

Murray State University

M.A. Degree in Education (MA Ed.)
M.A. Degree in Teaching (MAT)
M.A. Degree in College Teaching (MACT)
M.S. Degree

Northern Kentucky University

Master's degrees in Education are obtained through the Dept. of Education. We provide a 12-hour content area in Industrial Education.

University of Kentucky

M.A. Degree in Education with options in:
- Agricultural education
- Business education
- Home economics education
- Industrial education
- Vocational education

University of Louisville

M.Ed. with a major in Occupational Education (general)

M.Ed. with a major in Occupational Education (certification for the administration, supervision, and coordination of occupational education)

M.Ed. in Occupational Education (Instructional Systems Technology)

Western Kentucky University

Master of Arts in Education with majors in:
- Agriculture
- Allied health
- Business education and office administration
- Distributive education
- Home economics
- Industrial arts
- Industrial education
- Secondary education

Master of Arts in Education with major in secondary education may minor in agriculture, business education and office administration, distributive education, home economics, or industrial education.

Specialist Degrees.

Eastern Kentucky University

Specialist in Education

Murray State University

Specialist in College Teaching
Specialist in Education

University of Kentucky

Specialist in Education

Doctorate Degrees.

Eastern Kentucky University

Joint Doctoral Program in Education with the University of Kentucky

University of Kentucky

Doctor of Education

University of Louisville

Doctor of Education: Supervision, or Education Administration

Other Degrees.

Eastern Kentucky University

A.S. in Vocational-Industrial and Technical Education

Northern Kentucky University

A.A. S. in Industrial Education

University of Kentucky

B. Degree in Business and Office (non-certification)

University of Louisville

M.A.T. in School of Business

Administrative Structure of Vocational Teacher Education Programs

The vocational coordinator or department head at each institution was asked to describe how vocational teacher education was organized and administered at their university. Their responses follow.

Eastern Kentucky University.

"Vocational teacher education programs, including Industrial Arts, at the undergraduate level at Eastern Kentucky University are administered through two departments in two colleges: the Department of Curriculum and Instruction in the College of Education (Industrial Arts, Home Economics Education, Business Education) and the Department of Industrial Education and Technology in the College of Applied Arts and Technology (Vocational-Industrial and Technical Education).

"Subject matter courses are offered by the Department of Industrial Education and Technology for Industrial Arts and Vocational-Industrial and Technical students, and by the Department of Home Economics for students in Home Economics Education. Both of these departments are located in the College of Applied Arts and Technology. The Department of Business and Office Education in the College of Business provides the subject matter courses in Business Education.

"The department chair of each department is responsible for the educational program(s) in that department. They report directly to the dean of the College. Each vocational-teacher education program has a vocational-teacher educator."

"The College of Education, in cooperation with the Graduate School, offers the Master of Arts in Education degree for secondary teachers in Business, Agriculture, Industrial Arts and Home Economics Education. The subject matter courses are provided by the appropriate departments... while the professional courses are provided by the College of Education.

"The College of Applied Arts, in cooperation with the Graduate School offers the Master of Science degree in Industrial Education for teachers and administrators in industrial education.

"There is no one person designated as Coordinator of Vocational Education for the Institution or for a college."

Kentucky State University.

"Vocational teacher education programs are in various subject matter departments within the College of Applied Sciences, and School of Business....The responsibility for all teacher education programs at the University rests with the Teacher Education Committee. Each department that has a teacher education program is represented on this committee."

Morehead State University.

"Vocational Teacaher Education programs are located in the Colleges of Applied Sciences and Technology and Professional Studies. They are in the subject matter departments which are Agriculture and Natural Resources, Business and Economics, Industrial Education and Technology, and Home Economics. Dr. Michael Shaner is Coordinator of the Vocational Education programs at Morehead State University."

Murray State University.

"Vocational teacher education programs are in the various subject matter departments. All programs, with the exception of Business, report administratively to the College of Industry and Technology. The B&O and DE program areas report administratively to the College of Business and Public Affairs. All budgetary concerns relative to vocational funds are coordinated by the Dean, College of Industry and Technology."

Northern Kentucky University.

The vocational teacher education programs are under the Department of Technology and Occupational Education which is in the College of Professional Studies.

University of Kentucky.

The vocational teacher education programs make up the Dept. of Vocational Education which is in the College of Education.

University Louisville.

The vocational Teacher Education programs at the University of Louisville are in the Department of Occupational and Career Education which is one of seven departments within the School of Education. The teacher education portion of each degree is the responsibility of the School of Education. The students in each program are required to complete their specialty course work in other units on campus, or to transfer in their hours.

Western Kentucky University.

Vocational Education is administered by five different departments in three different Colleges (College of Business Administration, College of Education, and College of Science, Technology and Health.) Coordination is provided by the Center for Career and Vocational Teacher Education in the College of Education.

Distinctive Features

The vocational teacher education programs across the state are highly individual due to differences in faculty, course requirements, department orientation, and so on. Yet in many ways they are also similar: they train teachers for a specific program area.

When interviewed, each department head or coordinator was asked to look beyond the obvious differences and similarities and to mention any distinctive features or major activities in their programs. Three administrators cited specific program differences.

The staff at Northern Kentucky University indicated that some industrial trainers go through their program.

The vocational teacher education faculty at the University of Louisville offers a regularly scheduled program in non-certified education at Fort Knox. The mobility of these students contributes to a steady source of new enrollees.

Through use of a project staff member, students in Western Kentucky Unversity's vocational teacher education program are exposed to a special emphasis in education for the disadvantaged and handicapped. Western also houses the Materials Loan Center, which concentrates on educational materials regarding disadvantaged and handicapped students.

Admission Standards

Standards for admission to vocational teacher education programs showed considerable unanimity with, of course, some variation. Required grade point averages ranged from the mandated 2.0 to 2.5, with 2.25 being most common. CTBS scores of 12.5 were required by all schools with the exception of KSu who listed 12.7 as required in at least some of their programs.

Schools also reported a number of other admittance criteria: specific courses with certain minimum grade requirements; other proficiency tests such as speech; interest inventories, an interview (sometimes with rating sheets); letters of recommendation; speech, hearing, vision, and personality tests.

Student Teaching Hours

Teacher educators were asked: "How many contact hours do students in your program spend student teaching?" Answers varied. Some gave contact hours while others expressed the requirement in days or weeks.

While state regulations presently mandate a minimum of 12 semester hours earned in student teaching, the actual implementation apparently varies from program to program, depending on a mumber of factors, including course scheduling, and so on. The following responses were given.

Agriculture.

Morehead State University: 300 contact hours

Murray State University: 325 contact hours (minimum of 8 weeks)

University of Kentucky: 3 hours or more a day for 16 weeks

Western Kentucky University: 8 weeks (40 days)

Business and Office Education.

Eastern Kentucky University: 13 weeks full time.

Kentucky State University: In a school for 12 weeks; approximately 360 contact hours.

Morehead State University: 12 weeks, 6 hours per day. Minimum time limit for teaching, 135 hours; for conferences, 36 hours; for observation, 40 hours, and participation, 30 hours.

Murray State University: 360 hours.

Northern Kentucky University: 16 weeks, five days per week.

University of Kentucky: 15-16 weeks, 6 hours per day, 5 days a week.

University of Louisville: 8 credit hours. (6 hours per day, 15 weeks.)

Western Kentucky University: 12 weeks, 6 hours a day

Distributive Education.

Murray State University: 360 hours

University of Kentucky: Varied by placement situation and ability of individual student teacher.

University of Louisville: 8 hours

Home Economics Education.

Eastern Kentucky University: 12 weeks - full day

Kentucky State University: 12 hours -- 12 weeks (approximately 360 contact hours of 50 minutes each.)

Morehead State University: 360 hours (12 weeks of student teaching.)

Murray State University: 6 hour day x 5 x 12 weeks = 360 + after school and night activities related.

University of Kentucky: 375 hours with students.

Western Kentucky University: 8 weeks = 320 hours
12 weeks = 480 hours -- new

system soon to be in effect. Some still on 8 weeks. Presently in transition.

Faculty

In Kentucky in 1984-85, 92 faculty members at state universities were involved in vocational teacher education. Many of these also taught in other areas (such as content courses related to their field), as the full time equivalent (FTE) figure was only 46.995 (Table 13.) Some probably were also part-time instructors such as graduate assistants. Over two-thirds held doctorates, with most of the rest having master's degrees. More of the total faculty were in business education than in any other area.

As indicated in Table 14, faculty members have declined somewhat over the past five years, in actual numbers as well as in FTEs.

Enrollment and Output

Teacher educators fill many roles. Depending on the mission of the university and their particular situation, they may be expected to teach, do research, and participate in service activities in varying degrees. Many not only train new teachers but provide support and supervision for teachers in the field.

Some of these activities are not as quantifiable as one would like. Official records are not always kept on the number of teacher visits, or the time spent preparing in-service programs for teacher meetings. Yet the activities are vitally important to the improvement of teaching in Kentucky schools.

One particular sphere of activity, however, is both quantifiable and central to the role of the teacher educator: the enrollment and graduation of students. While recognizing that many other responsibilities are also involved, enrollments and graduation in any given year reflect in one way the size of a program and the demands on the faculty.

Data provided in Table 15 present a summary of undergraduate students reported to be in teacher education in each service area in 1984-85. The figures for freshmen, sophomores, and juniors also provide some indication of future new additions to the teacher pool. However, these numbers are subject to increases and decreases as students change majors. Class sequences and time of entrance into TEP programs also affect representation of numbers reported.

The total of seniors and "Other" provide an estimate of the new teacher pool for 1985-86. (According to comments, "Other" often referred to graduates who returned to school to earn teaching

Table 13

Summary of 1984-85 Vocational Teacher Education Faculty: Numbers, Degrees, FTEs, and K-12 Experience

Service Area	Highest Degree BA/BS	MA/MS	Doctorate	Total n	FTE	Number with K-12 Experience
Agriculture	0	0	7	7	6.0	7
Business & Office	2	10	17	29	14.95	6
Distributive Education	0	0	2	2	0.25	0
Health and Personal Services	0	2	7	9	1.52	8
Home Economics	1	4	6	11	5.40	10
Industrial Arts, Industrial Education, Levels I and II	0	4	8	12	4.65	5
Industrial Education, Level III	0	3	10	13	7.875	13
General Vocational Education	0	0	9	9	6.35	8
Total	3	23	66	92	46.995	57

Table 14

Summary of Vocational Faculty and Faculty Time Equivalents (FTEs)
1979-1984

Service Area	1979-1980		1980-1981		1981-1982		1982-1983		1983-1984	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Agriculture	8	7.00	8	7.00	7	6.00	7	6.00	7	6.00
Business and Office	25	23.5	25	23.50	23	21.50	21	19.25	22.5	20.50
Distributive Education	4	2.55	4	2.55	3	2.05	2	1.05	2	1.05
Health and Personal Services	15	10.50	15	10.50	15	11.00	14	9.50	14	9.00
Home Economics	11	9.00	12	9.75	11	8.75	10	7.00	12	8.25
Industrial Arts, Ind. Education Levels I and II	12	11.00	12	11.0	12	11.00	12	11.00	12	11.00
Industrial Education, Level III	16	13.25	16	13.25	13	10.05	11	9.25	13	10.25
General Vocational Education	10	8.00	10	8.00	9	7.00	9	7.0	10	7.10
Total	101	84.80	102	85.55	93	77.35	86	70.05	92.5	73.15

Table 15

Summary of Vocational Undergraduate Enrollments: 1984-85

Service Area	Freshmen		Sophomores		Juniors		Seniors		64-Hr.		64-Hr./B.S.		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Agriculture	17	14.8	45	27.1	51	23.9	42	21.7	0	0.0	0	0.0	14	35.9	169	12.9
Business & Office	19	16.5	41	24.7	61	28.6	53	27.3	0	0.0	0	0.0	16	41.0	190	14.5
Distributive Education	2	1.7	1	0.6	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	5	0.4
Health and Personal Services	0	0.0	0	0.0	0	0.0	0	0.0	25	7.8	25	9.6	3	7.7	53	4.1
Home Economics	24	20.9	28	16.9	31	14.6	41	21.1	0	0.0	0	0.0	3	7.7	127	9.7
Industrial Arts, Industrial Education Levels I and II	47	40.9	46	27.7	63	29.6	47	24.2	0	0.0	0	0.0	3	7.7	206	15.7
Industrial Education, Level III	6	5.2	5	3.0	5	2.4	11	5.7	295	92.2	236	90.4	0	0.0	558	42.7
TOTAL	115	100.0	166	100.0	213	100.0	194	100.0	320	100.0	261	100.0	39	100.0	1308	100.0

certificates. This, however, was not so specified in the data collection.)

The pool of 64-hour and 64-hour/B.S. enrollees shown in Table 15 represents not a potential teacher pool but, rather, teachers who were already teaching and who were also enrolled to earn their certificate or degree.

Pre-service and in-service graduates over the past five years are shown in Table 16. Total graduates declined from 299 in 1979-80 to 256 in 1983-84. The general decline held true in some program areas, but not in others. The industrial education areas showed an overall increase in graduates while distributive education, business and office, and home economics declined.

A total of 702 vocational teacher education graduates were enrolled in vocational teacher education graduate courses in 1984-85 (see Table 17.) (This does not include those who only took courses in areas outside of vocational teacher education.) Two-thirds were in master's degree programs, with the largest group (107) being in the industrial education level III service area. The group labeled "Other" was reported by administrators as being in general vocational education programs rather than in specific subject matter service areas.

Numbers of graduate students who were considered to be enrolled in the various service area graduate programs were summarized in Table 18. These were students who were considered to be "in the pipeline" of a program as of 1984-85, whether or not they had taken a course during the year. Again, more were enrolled in the industrial education level III service area than in any other area, with business and office education having the second largest group. Most of the doctoral students were classified as general vocational education regardless of subject matter orientation.

Summaries of graduate degrees and graduate certificate completions from 1979-80 to 1983-84 are presented in Table 19. Master's degrees and fifth year completions made up the largest group, with 855 out of the total of 1049 completions. (Very few 5th year completions were indicated by the data: almost all were master's degrees.) The Rank I/Specialist group was next in size with 164 completions. Twenty-five doctorates were reported, with fifteen being in general vocational education. "Other" degrees probably represented general vocational education degrees rather than, e.g., home economics doctorates.

Examination of the data year by year indicates a general downward trend in the numbers of graduate degrees or certificate

Table 16

Summary of Vocational Teacher Education Graduates: 1979-1981

	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating	
	n	%	n	%	n	%	n	%	n	%	n	%
Agriculture	62	20.7	58	19.9	49	16.7	76	26.3	66	25.8	311	21.6
Business and Office	91	30.4	74	25.3	64	21.8	52	18.0	53	20.7	334	23.2
Distributive Education	13	4.4	14	4.8	9	3.1	6	2.1	4	1.6	46	3.2
Health and Personal Services[a]	8	2.7	8	2.7	17	5.8	10	3.4	10	3.9	65[b]	4.5
Home Economics	43	14.4	47	16.1	36	12.3	32	11.1	26	10.1	184	12.8
Industrial Arts, Industrial Ed. Levels I and II	46	15.4	50	17.1	67	22.9	70	24.2	53	20.7	286	19.8
Industrial Education, Level III	36	12.0	41	14.1	51	17.4	43	14.9	44	17.2	215	14.9
Total	299	100.0	292	100.0	293	100.0	289	100.0	256	100.0	1,441	100.0

[a] Data was not available for Morehead State University.

[b] NKU provided a total of Health & Personal Services graduates over the five-year span, but gave no yearly breakdown. Therefore, they are included only in the total and not in the yearly tally.

Table 17

Summary of Vocational Teacher Education Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Service Area	5th Year		M.A./M.S.		Rank I		Doctorate		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Agriculture	5	12.2	68	14.6	15	12.2	0	0.0	0	0.0	88	12.5
Business and Office	12	29.3	86	18.5	21	17.1	0	0.0	0	0.0	119	17.0
Distributive Education	1	2.4	9	9	10	8.1	0	0.0	0	0.0	20	2,8
Health and Personal Services	0	0.0	19	4.0	1	0.8	0	0.0	0	0.0	20	2.8
Home Economics	4	9.8	49	10.5	22	17.9	4	8.5	0	0.0	79	11.3
Industrial Arts, Industrial Education Levels I and II	1	2.4	52	11.2	0	0.0	0	0.0	0	0.0	53	7.6
Industrial Education, Level III	3	7.3	107	23.0	8	6.5	5	10.6	0	0.0	123	17.5
General Vocational Education	15	36.6	76	16.3	46	37.4	38	80.9	25	100.0	200	28.5
Total	41	100.0	466	100.0	123	100.0	47	100.0	25	100.0	702	100.0

Table 18

Summary of Vocational Teacher Education Students Considered to be Enrolled in a Post-Baccalaureate Program

Service Areas	5th Year		M.A./M.S.		Rank I		Specialist		Doctorate		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Agriculture	5	13.9	68	13.8	15	9.5	0	0.0	0	0.0	88	12.0
Business and Office	8	22.2	109	22.1	32	20.2	0	0.0	0	0.0	149	20.4
Distributive Education	0	0.0	14	2.8	2	1.3	0	0.0	0	0.0	16	2.2
Health and Personal Services	0	0.0	29	5.9	10	6.3	0	0.0	0	0.0	39	5.3
Home Economics	9	25.0	43	8.7	36	22.8	1	20.0	0	0.0	89	12.2
Industrial Arts, Ind. Education Levels I and II	0	0.0	32	6.5	2	1.3	3	60.0	0	0.0	37	5.0
Industrial Education, Level III	3	8.3	136	27.6	38	24.0	0	0.0	7	17.5	184	25.1
General Vocational Education	11	30.6	62	12.6	23	14.6	1	20.0	33	82.5	130	17.8
Total	36	100.0	493	100.0	158	100.0	5	100.0	40	100.0	732	100.0

Table 19

Summary of Graduate Degrees and Certificate Completions in Vocational Teacher Education 1979-1984

Service Area	Year																				Sub-Total				Total	
	1979-80				1980-81				1981-82				1982-83				1983-84									
	5th/M	R. I/Sp.	Doctorate	Other	5th/M	R. I/Sp.	Doctorate	Other	5th/M	R. I/Sp.	Doctorate	Other	5th/M	R. I/Sp.	Doctorate	Other	5th/M	R. I/Sp.	Doctorate	Other	5th/M	R. I/Sp.	Doctorate	Other	n	%
Agriculture	43	6	0	0	39	19	0	0	37	12	0	0	28	7	0	0	22	6	0	0	169	50	0	0	219	20.9
Business and Office	71	13	2	0	40	10	2	0	37	11	2	0	34	8	1	0	36	10	0	0	218	52	7	0	277	26.4
Distributive Education	3	0	0	0	2	0	0	0	5	0	0	0	3	0	0	0	2	4	0	0	15	4	0	0	19	1.8
Health and Personal Services	5	3	0	0	4	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0	15	3	0	0	18	1.7
Home Economics	29	5	0	0	26	6	0	3	39	3	2	0	25	2	1	0	34	1	0	2	153	17	3	5	178	17.0
Industrial Arts, Ind. Ed. Levels I and II[a]																										
Industrial Education Level III	25	5	0	0	16	4	0	0	16	4	0	0	20	5	0	0	20	5	0	0	97	23	0	0	120	11.4
General Vocational Education	50	3	4	0	38	3	2	0	46	4	4	0	37	1	1	0	17	4	4	0	188	15	15	0	218	20.8
TOTAL	226	35	6	0	165	42	4	4	181	34	8	0	149	23	3	0	133	30	4	2	855	164	25	5	1,049	100.0

[a] Complete data not available

completions, especially regarding master's degrees.

Follow-Up of Graduates

Teacher educators were asked to report on the present employment of their graduates from the past five years. At least 49.2% of the total number of graduates were in jobs requiring a certificate or, in other words, were teaching (Table 20.) Industrial education level III had an especially large proportion of graduates in teaching (93.5%,) no doubt due to the fact that these graduates had already been in teaching jobs before graduation.

A number of graduates were also reported to be in related jobs not requiring a certificate. While the actual jobs were not specified, they could include positions such as cooperative extension in agriculture and home economics; industrial or technological positions in industrial arts and industrial education; secretarial, bookkeeping, data processing, and other offfice positions in business; nursing, medical and dental technology, cosmetology, or other positions for which the health occupations graduates had originally trained.

Teacher educators indicated "Don't Know" for a considerable number of their graduates. While the proportion varied from service area to service area, whereabouts were unknown for one-fourth of the overall group.

Table 20

Summary of Present Employment of Vocational Teacher Education Graduates from 1979-80 to 1983-84

Service Area	Employed in Job Requiring Certificate		Employed in Related Job; No certificate		Employed at Unrelated Job		Graduate School, Armed Services, Unemployed		Don't Know		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Agriculture	124	40.3	118	38.3	26	8.4	23	7.5	17	5.5	0	0.0	308	100.0
Business & Office	95	28.4	47	14.1	8	2.4	9	2.7	174	52.1	1	0.3	334	100.0
Distributive Education	9	19.6	2	4.3	1	2.2	2	4.3	32	69.6	0	0.0	46	100.0
Health and Personal Services[a]	55	80.9	13	19.1	0	0.0	0	0.0	0	0.0	0	0.0	68	100.0
Home Economics	68	37.2	55	30.0	7	3.8	15	8.2	38	20.8	0	0.0	183	100.0
Industrial Arts, Industrial Ed. Levels I & II[a]	122	60.4	0	0.0	6	3.0	3	1.5	71	35.1	0	0.0	202	100.0
Industrial Education, Level III	186	93.5	1	0.5	3	1.5	0	0.0	9	4.5	0	0.0	199	100.0
TOTAL	659	49.2	236	17.6	51	3.8	52	3.9	341	25.4	1	0.1	1,340	100.0

[a] Complete data not available.

Agricultural Education

Teachers of Agriculture

During the school year 1984-85 there were 279 people teaching vocational agriculture in Kentucky. The typical Kentucky teacher of agriculture was a male 36 years old with about 12 years of teaching experience. He probably held a Rank I or Rank II certificate, indicating he had earned the equivalent of a master's degree or higher. His advanced degree was most likely to have been earned at the University of Kentucky.

While this profile portrays the average or dominant characteristics of teachers of vocational agriculture, it does not reflect adequately the many facets and the wide range of individual characteristics that in reality make up the statewide corps of vo-ag teachers. To further explore these characteristics we must turn to more specific data.

Unless stated otherwise, tables reflect all the teachers of agriculture in the state. However, some data were available only on reimbursed teachers or only on state-employed teachers. Such data are so labeled in the title of the table.

Some data on state-employed teachers came from regional directors. Much data on state-employed teachers came from the Vocational Teacher Data Form (VTDF.) Occasional missing data acount for tables that total less than the actual number of teachers.

Number of Teachers

Based on Kentucky Department of Education figures and a survey of regional directors, there were 279 teachers of agriculture in Kentucky in 1984-85. Table 21 shows the number in each region according to whether they were reimbursed teachers in local school districts or state-employed teachers in state-operated programs such as vo-tech schools and area centers. As the figures indicate, most teachers of agricultre taught in local school districts, primarily secondary schools.

Table 22 records the number of state-employed teachers in each region teaching in specific O.E.-designated program areas. All taught either ag production or horticulture. The figures include those teaching adults. Comparable information was not available for reimbursed teachers in local school districts.

Teachers of agriculture were primarily male. However, in 1984-85 eight females were teaching some area of agriculture, all in local school districts.

Table 21

Numbers of Teachers of Agriculture in Kentucky 1984-85, By Type of Teacher and Vocational Region

Type of Teacher	Vocational Regions														Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Reimbursed	21	20	19	26	21	16	12	23	6	8	6	15	23	40	256
State-Employed	3	4	1	3	0	1	0	3	1	0	0	1	3	3	23
Total	24	24	20	29	21	17	12	26	7	8	6	16	26	43	279

Table 22

Numbers of 1984-85 State-Employed Teachers of Agriculture Under Each Program Title, for Each Vocational Region

Program Titles and O.E. Codes	Vocational Regions														Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Ag. Production 01.0100	3	4	1	3	0	0	0	3	0	0	0	1	2	1	18
Horticulture 01.0500	0	0	0	0	0	1	0	0	1	0	0	0	1	2	5
Total	3	4	1	3	0	1	0	3	1	0	0	1	3	3	23

Age and Experience

In 1984-85 the average teacher of agriculture was 36.1 years old and had taught for 11.9 years. The mean ages and years of teaching experience for each region are shown in Tables 23 and 24.

A major reason for considering age and experience of teachers is to look at the number of teachers approaching a likely retirement age and speculate on numbers of replacements that might be needed. Data presented in Tables 23 and 24 indicate that in Kentucky fifteen of these teachers were 56 years of age or older in 1984-85 and could be considering retirement, while ten had completed thirty or more years of teaching.

Teacher Turnover

Table 24 indicates the 1984-85 new hire rate (the percentage of teachers who were in their first year of teaching) for all Kentucky teachers of agriculture to be 1.8%. Table 25 then presents statewide new hire data over the past five years for reimbursed teachers only.

Rank

Teachers of agriculture tend to progress through the certification system of ranking. As shown in Table 26, since 1980-81 the proportions of reimbursed Rank III and Rank II teachers have steadily declined while the proportions of Rank I teachers have steadily increased. In fact, teachers of agriculture had a greater proporton of Rank I teachers (42.7%) than any other service area group of Kentucky vocational teachers. Comparisons of 1984-85 data in Tables 26 and 27 indicate that proportions of rank distribution for the total group of teachers was similar to the rank distribution for reimbursed teachers only.

Regional rank distribution for all 1984-85 teachers of agriculture in Kentucky is shown in Table 27. Individual universities may wish to plan educational efforts in relation to regional needs.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were also asked to indicate the highest degree or certification they had completed. This information, along with degree goals, is provided in Table 28. The same information was not directly available from reimbursed teacher data. However, the ranking system for these teachers is such that completion of a Rank I indicates completion of a master's degree plus 30 hours, a Rank II equals a master's degree or planned fifth year program, and a Rank III indicates a bachelor's degree. Therefore, rank information in Tables 26 and 27 can be assumed to reflect the highest degree held by agriculture teachers across the state. Over two-fifths (42.7%) of

Table 23

Ages of 1984-85 Teachers of Agriculture

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	1	1	0	0	1	0	2	0	0	0	0	1	1	7	2.5
26-30	7	2	5	3	2	4	3	3	0	1	2	6	8	8	54	19.3
31-35	3	4	8	9	6	4	5	9	1	4	2	2	6	17	80	28.7
36-40	8	5	3	4	5	2	2	5	4	2	1	3	4	8	56	20.1
41-45	2	3	1	5	2	1	0	2	1	0	0	1	2	4	24	8.6
46-50	1	3	0	1	2	2	1	1	0	0	1	1	0	0	13	4.6
51-55	1	2	1	5	1	3	1	1	0	0	0	2	3	2	22	7.9
56-60	0	1	1	1	3	0	0	1	0	1	0	0	1	1	10	3.6
61-65	0	0	0	1	0	0	0	2	1	0	0	1	0	0	5	1.8
65+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	2	3	0	0	0	0	0	0	0	0	0	0	1	2	8	2.9
Total	24	24	20	29	21	17	12	26	7	8	6	16	26	43	279	100.0
Mean Age	35	39	34.6	40.1	40	37.8	35	37	40.7	36	35	37.4	35.6	34.7	36.1	

Table 24

Years of Experience of 1984-85 Teachers of Agriculture

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	2	1	0	0	0	0	0	2	0	0	0	0	0	0	5	1.8
1-4	4	4	4	1	1	1	1	3	0	0	2	4	4	8	37	13.3
5-9	4	1	9	8	6	6	6	7	2	4	1	6	9	17	86	30.8
10-14	8	8	3	5	4	5	3	7	2	2	1	0	6	8	62	22.2
15-19	3	3	1	6	4	2	0	2	3	1	1	2	3	4	35	12.5
20-24	2	2	2	5	3	0	0	2	0	0	1	1	0	5	23	8.2
25-29	1	5	1	2	0	3	2	2	0	0	0	2	2	0	20	7.2
30-34	0	0	0	1	2	0	0	0	0	1	0	0	0	0	4	1.4
35-39	0	0	0	1	1	0	0	1	0	0	0	0	1	1	5	1.8
40-44	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.4
45+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4
Total	24	24	20	29	21	17	12	26	7	8	6	16	26	43	279	100.0
Mean Years of Experience	10.5	14.1	8.7	14.4	15	12	10	11.6	11.9	12	10	11.5	11.2	9.7	11.9	

Table 25

New Hire Rates for Kentucky Reimbursed Teachers of Agriculture, 1980-1985

Year	Total Reimbursed Teachers	0 Years Experience	
		n	% or "New Hire Rate"
1980-81	271	10	3.7
1981-82	269	11	4.1
1982-83	263	14	5.3
1983-84	266	6	2.3
1984-85	256	5	2.0

Table 26

Ranks and Percentages of Kentucky Reimbursed Teachers of Agriculture, 1980-85

Year	Rank I		Rank II		Rank III		Total n
	n	%	n	%	n	%	
1980-81	77	28.4	145	53.5	49	18.1	271
1981-82	89	33.1	137	50.9	43	16.0	269
1982-83	102	38.8	120	45.6	41	15.6	263
1983-84	111	41.7	116	43.6	39	14.7	266
1984-85	114	44.5	110	43.0	32	12.5	256

Table 27

Ranks of Kentucky Teachers of Agriculture, 1984-85, for All Regions

Rank Level	Vocational Regions														Statewide Totals
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Rank I															
Teachers	14	12	9	11	10	7	3	10	1	3	2	5	12	20	119
%	58.3	50.0	45.0	37.9	47.6	41.2	25.0	38.5	14.3	27.5	33.3	31.3	46.2	46.5	42.7
Rank II															
Teachers	8	11	7	16	10	9	7	12	6	4	2	8	8	15	123
%	33.3	45.8	35.0	55.2	47.6	52.9	58.3	46.2	85.7	50.0	33.3	50.0	30.8	34.9	44.1
Rank III															
Teachers	2	1	3	2	1	1	2	4	0	1	2	3	5	8	35
%	8.3	4.2	15.0	6.9	4.8	5.9	16.7	15.4	0.0	12.5	33.3	18.7	19.2	18.6	12.6
Unknown															
Teachers	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
%	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.7
Total Teachers	24	24	20	29	21	17	12	26	7	8	6	16	26	43	279

the state's agriculture teachers hold a Rank I or master's degree plus 30 hours. Eighty-seven percent hold a Rank I or II or a master's degree/5th year or above.

Data also indicated the institution from which teachers received their most recently completed degree or certificate. As shown in Table 29, most (all but seven percent) received those degrees from state institutions with agricultural teacher education programs.

Data shown in that same table also indicate that teachers tended to be employed in the regions generally surrounding the institution where they secured their highest degree. It would appear that, for the regional universities in particular, location has a great deal to do with where one does post-graduate work. The University of Kentucky was an exception with a scattering of graduates in every region across the state. At the same time, the largest share of University of Kentucky graduates were also employed generally nearer the University.

This characteristic relating geography to enrollment is hardly surprising, since most of the "most recent" or "highest" degrees were advanced degrees (87.5 percent held Rank I or II) earned as commuters while teaching full time rather than as full-time on-campus graduate students.

Present Enrollment in Higher Education

Information about present enrollment of reimbursed teachers in university programs was not available from the PSD forms. That topic, however, was included on the VTD form completed by state-employed teachers. Some of those results are reported briefly here.

Of the twenty-three state-employed teachers, two of them reported being enrolled in a master's degree program, and nine reported enrollment in a master's-plus-30-hours program. Four claimed enrollment at Murray State University with an average of 15 hours to complete, and four claimed the Unversity of Kentucky with an average of 19 hours to complete. One each claimed Morehead State University, Western Kentucky University, and an in-state independent school. This in no way represents total enrollments by all vocational agriculture teachers.

Degree Goals

State-employed teachers were asked about their degree goals. Responses regarding degree goals in relation to the highest degree presently held, or "how far one has yet to go," are reflected in Table 28.

Fourteen teachers, or about two-thirds, indicated having as a goal some degree higher than that degree which they presently held.

Table 28

Degree Goals of 1984-85 State-Employed Vocational Agriculture Teachers Distributed in Relation to Highest Degree Presently Held

Highest Degree/ Certificate Presently Held	Degree/Certificate Goal							Total	
	Bachelor's	5th Year	Master's	Master's +30	Doctorate	Other	No Response	n	%
Bachelor's	0	0	2	1	0	1	1	5	21.7
5th Year	0	0	0	0	1	0	0	1	4.4
Master's	1	0	1	8	1	1	0	12	52.2
Master's +30	0	0	0	2	1	0	2	5	21.7
Total	1	0	3	11	3	2	3	23	100.0

Table 29

Institutions Where Kentucky 1984-85 Vocational Agricultural Teachers
Received Their Highest or Most Recently Completed Degree or Certificate

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	1	0	1	0	3	1	0	0	0	2	2	3	13	4.7
Kentucky State University	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4
Morehead State University	0	0	0	0	0	0	1	10	4	4	2	2	0	5	28	10.1
Murray State University	21	16	4	1	2	1	1	2	0	0	0	0	0	0	48	17.2
Northern Kentucky University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
University of Kentucky	2	7	2	9	9	11	6	13	3	4	4	11	12	34	127	45.7
University of Louisville	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0.7
Western Kentucky University	1	11	18	8	4	1	0	0	0	0	0	0	10	1	54	19.4
Other Schools, In-State	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.4
Other Schools, Out-of-State	1	0	1	1	0	1	0	0	0	0	0	0	0	0	4	1.4
Total	25	34	27	19	17	14	11	26	7	8	6	16	25	43	278	100.0

Eight of the fourteen wanted to earn the master's-plus-30-hours (or Rank I.) Two indicated "Other," which possibly reflected some goal not listed on the survey form.

As with some previous data, goals of reimbursed teachers were not available due to different sources of information. Therefore, this information is available on only a small proportion of teachers of agriculture.

Agricultural Teacher Education

Historical Perspective

The nearly 300 teachers of agriculture in Kentucky today and the many teachers who preceded them have been trained and served over the years by the teacher education programs in Kentucky colleges and universities. These teacher education programs were established after Kentucky moved to accept the provisions of the Smith Hughes Act in the latter months of 1917. The Act provided federal assistance for the training of present and prospective farmers for proficiency in farming. Dr. McHenry Rhodes served briefly as Kentucky's State Director of Vocational Education. He was followed by G. Ivan Barnes, who also served as State Supervisor of Agricultural Education.

The agricultural education courses were first offered during 1917-1923 in the Department of Education of the College of Arts and Sciences, University of Kentucky. The program provided pre-service and in-service training for teachers of vocational agriculture, follow-up supervision, and so on. Since 1923, teacher education courses have been offered in the Division of Vocational Education (later changed to Department of Vocational Education) in the College of Education.

The first head agricultural education teacher trainer was Dr. McNeal C. James who served in this capacity from 1917 to 1920. Dr. Claude C. Anderson filled the position from 1920 to 1924. He was succeeded by Dr. Carsie Hammonds, who served until his retirement in 1964. Dr. Harold R. Binkley served as head of agricultural education until 1979, followed by Dr. Charles Byers.

The University of Kentucky remained the only institution in the state that trained teachers of agriculture until 1925 when a teacher education program was established at Western Kentucky State Teacher College (later Western Kentucky State University) at Bowling Green. Dr. Conner Ford served as the Chairman of Western's Department of Agriculture when teacher training in agriculture was first offered.

Berea College initiated pre-service instruction for teachers of vocational agriculture and follow-up supervision in 1927.

Kentucky State Teacher's College (later called Kentucky State University) initiated a pre-service and in-service training program for Negro teachers of agriculture in 1937. Mr. J. J. Mark, Head of the Department of Agriculture, was designated the teacher trainer.

The four institutions continued to provide teacher training in agricultural education until the mid 1940s (years of World War II), when by mutual agreement among the three white institutions it was decided that only one institution was needed to train teachers of agriculture for the state of Kentucky. The University of Kentucky was designated as that institution. It was further agreed that all of the courses required for certification would be offered in single semesters so that students from the other institutions could attend the University of Kentucky for a semester and have the course work transferred to their parent institution for graduation.

The Department of Agricultual Education at the University of Kentucky made it a policy to have a teacher trainer visit the three state colleges each semester to inform prospective students of teaching opportunities and of the teacher education program to prepare teachers of agriculture.

Kentucky State Teacher's College continued to train Negro teachers of agriculture until after the passage of the Civil Rights Amendment.

The University of Kentucky continued to be the only institution training teachers of agriculture, with a placement rate of 80 percent and follow-up supervision by a teacher trainer of each new teacher with two to three full day visits to the school during the first school year. During the period of the 1950s through the mid 1960s annual employment of new teachers in Kentucky ranged from 24 to 30, while enrollment in teacher education ranged from 15 to 18 each semester for a total of 30 to 36 annually.

In 1967 when Dr. Harry Sparks, formerly Kentucky Superintendent of Public Instruction, became President of Murray State University, a pre- and in-service teacher-training program was established there with Bill Cherry teaching courses the first year. This action was followed by formation of a program headed by Dr. James McGuire at Western Kentucky University in 1968 and by initiation of a program headed by Dr. Joe Bendixon at Morehead State University in 1971.

Table 30 illustrates the chronology of these program additions and deletions in Kentucky agricultural teacher education leading up to 1971. Since that time four Kentucky universities have operated agricultural teacher education programs. The geographic location of these programs is portrayed in Figure 3.

Table 30

Chronological Development of Kentucky Agricultural Teacher Education Programs

Date	Institution
1917-1923	University of Kentucky
1925	Western Kentucky State Teachers College (WKU)
1925	Berea College
1937	Kentucky State Teacher's College (KSU)
mid 1940s	Dropped Western Kentucky University, Berea College
1967	Murray State University
1968	Western Kentucky University
1971	Morehead State University

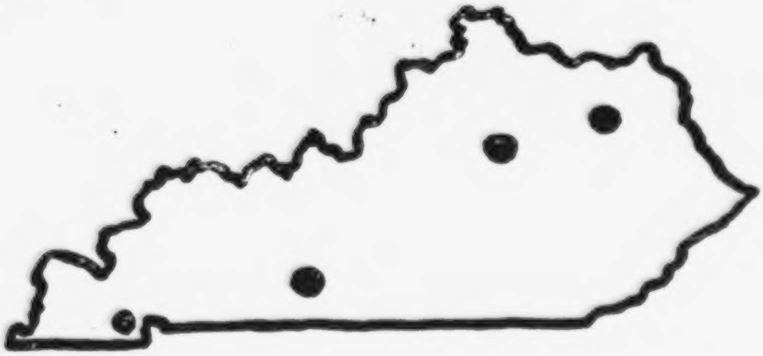

Figure 3

Location of Kentucky Agricultural Teacher Education Programs

Enrollment Patterns

Agricultural teacher educators were asked to describe a typical or a recommended enrollment pattern for their students.

Students from Morehead State University and the University of Kentucky were reported as enrolling in agriculture education at any level from freshman on up.

Murray State University reported that their students enroll in agriculture for two years and transfer to agricultural education for their junior and senior years.

Western Kentucky University students normally enroll in their first agricultural education course during their sophomore or junior year.

Faculty

Teacher educators were asked to report the numbers of full-time and part-time faculty members in agricultural teacher education over the past five years. Faculty members reported for 1979-1984 were recorded as 1 FTE if full-time and 0.5 FTE if part time, unless more detail was provided. More precise percentages of time allotted to vocational teacher education were requested and recorded for 1984-85.

A composite of these faculty time equivalents calculated from data provided is presented in Table 31. In 1984-85 there were seven teacher educators or 6.0 FTEs. All agricultural teacher education faculty members in Kentucky held doctorate degrees and reported experience in K-12 programs (in this case, high school vocational agriculture.)

The faculty members, both in terms of faculty time equivalents and in terms of actual personnel, have remained fairly stable over the six reported years (Table 32.) Except for the loss of one position at the University of Kentucky in 1981, there have been no changes.

It should be noted that part-time people in agricultural education were employed full-time by the university but split their teaching load between agricultural education and some other department or program such as agriculture.

Enrollment and Output

Undergraduate or preservice class enrollment figures reported by each agricultural teacher education program for 1984-85 are shown in Table 33. No freshmen are shown for Western Kentucky University where they cannot enroll in teacher education until the sophomore year.

Program heads were asked to indicate numbers of graduates from the undergraduate program along with the number of graduates who also applied for a teaching certificate. Over the years of 1979-80 to 1983-84 a total of 311 students graduated from agriculture education programs, and 308 of them applied for teaching certificates. The number of graduates for each year from each program, as well as the total number from each school who applied for a teaching certificate are indicated in Table 34.

Program heads were also asked to report the numbers of post-baccalaureate students they considered to be enrolled in their programs, whether or not they had taken courses in 1984-85. These were the graduate students that were "in the pipeline" but not necessarily actively taking classes at the time of the survey. Responses are presented in Table 35. Program heads were also asked to report the numbers of their graduate students who actually took a class during 1984-85. For agricultural education programs, the numbers of students enrolled in graduate programs were the same as the number of students who actually took courses in the program area.

Data on completions or graduations in graduate programs in agricultural education are presented in Table 36. During the five years represented, 169 students completed fifth-year or master's degree programs and 50 completed Rank I or specialist programs. Of these, master's degrees and Rank I programs were by far the most predominant.

Table 31

Agricultural Education Faculty Degrees, FTE, and K-12 Experience; 1984-85

Institution	Highest Degree BA/BS	 MA/MS	 Doct.	Total n	FTE	Number with K-12 experience
Eastern Ky. University						
Kentucky State University						
Morehead State University	0	0	1	1	0.75	1
Murray State University	0	0	2	2	2.0	2
Northern Ky. University						
University of Kentucky	0	0	2	2	2.0	2
University of Louisville						
Western Ky. University	0	0	2	2	1.25	2
Total	0	0	7	7	6.0	7

Table 32

Agricultural Education Faculty and Faculty Time Equivalents (FTEs): 1979-1984

Institution	1979-1980		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University										
Kentucky State University										
Morehead State University	1	0.75	1	0.75	1	0.75	1	0.75	1	0.75
Murray State University	2	2.00	2	2.00	2	2.00	2	2.00	2	2.00
Northern Ky. University										
University of Kentucky	3	3.00	3	3.00	2	2.00	2	2.00	2	2.00
University of Louisville										
Western Kentucky University	2	1.25	2	1.25	2	1.25	2	1.25	2	1.25
Total	8	7.00	8	7.00	7	6.00	7	6.00	7	6.00

---

[a] Based on: Full time all year = 1; Part time all year = 0.5

Table 33

Undergraduates Enrolled for 1984-85 in Teacher Education

Institution	Freshmen		Sophomores		Juniors		Seniors		Other	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University										
Kentucky State University										
Morehead State University	7	41.2	8	17.8	8	15.7	7	16.7	5	35.8
Murray State University	7	41.2	9	20.0	10	19.6	6	14.3	3	21.4
Northern Kentucky University										
University of Kentucky	3	17.6	9	20.0	10	19.6	13	30.9	3	21.4
University of Louisville										
Western Kentucky University	0	0.0	19	42.2	23	45.1	16	38.1	3	21.4
Total	17	100.0	45	100.0	51	100.0	42	100.0	14	100.0

Table 34

Kentucky Agricultural Education Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating		Applying for Certificate
	n	%	n	%	n	%	n	%	n	%	n	%	
Eastern Kentucky University													
Kentucky State University													
Morehead State University	11	17.7	6	10.4	8	16.3	10	13.2	11	16.7	46	14.8	46
Murray State University	14	22.6	14	24.1	17	34.7	11	14.5	14	21.2	70	22.5	70
Northern Kentucky University													
University of Kentucky	18	29.0	23	39.7	11	22.5	33	43.4	14	21.2	99	31.8	96
University of Louisville													
Western Kentucky University	19	30.7	15	25.9	13	26.5	22	29.0	27	40.9	96	30.9	96
Total	62	100.0	58	100.0	49	100.0	76	100.0	66	100.0	311	100.0	308

Table 35

Agricultural Education Students Enrolled in a Post-Baccalaureate Program, 1984-85

Institution	5th Year		M.A./M.S.		Rank I		Specialist		Total	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University										
Kentucky State University										
Morehead State University	0	0.0	10	14.7	2	13.3	0	0.0	12	13.7
Murray State University	0	0.0	9	13.2	0	0.0	0	0.0	9	10.2
Northern Kentucky University										
University of Kentucky	2	40.0	21	30.9	5	33.3	0	0.0	28	31.8
University of Louisville										
Western Kentucky University	3	60.0	28	41.2	8	53.3	0	0.0	39	44.3
Total	5	100.0	68	100.0	15	99.9	0	0.0	88	100.0

Table 36

Graduate Program Completions in Agriculture Education

Institution	1979-1980		1980-1981		1981-1982		1982-1983		1983-1984		Sub Total		Grand Total	
	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	n	%
Eastern Ky. University														
Kentucky State University														
Morehead State University	6	0	7	0	9	0	5	0	6	0	33	0	33	15.0
Murray State University	7	3	6	3	7	2	5	3	4	2	29	13	42	19.2
Northern Ky. University														
University of Kentucky	21	1	13	13	12	7	10	2	4	3	60	26	86	39.3
University of Louisville														
Western Ky. University	9	2	13	3	9	3	8	2	8	1	47	11	58	26.5
Total	43	6	39	19	37	12	28	7	22	6	169	50	219	100.0

Follow-Up of Graduates

In order to see what graduates of a program do and, especially, how many go into teaching, program heads were asked about present employment of graduates. Responses are presented in Table 37. Over one-third of the total pool of 308 students who graduated and applied for certification during the years 1979-80 to 1983-84 were reported to be in jobs requiring certification, presumably teaching jobs. Over a third more were employed in related jobs where no certificate was needed. In the case of agricultural education graduates, this often included cooperative extension work or farming. Nothing is known regarding how many of the others who desired to teach but who could not find an appropriate teaching position.

Summary

From an examination of the data several facts stand out. Teachers of agriculture tended to be fairly young with few teachers nearing retirement age or the 30-years-of-teaching landmark. These figures, coupled with the low replacement or "new hire rate" of 1.8 percent, would seem to indicate that for the next few years not many new vocational agriculture teachers will be needed.

These teachers have been actively pursuing rank increases and, if state-employed teachers are representative of the total population of teachers, many plan to continue their education to a master's degree-plus-30-hours or higher.

Four agricultural education programs with seven faculty members presently train new teachers of agriculture and serve experienced teachers. All seven faculty members held doctorates and possessed experience in K-12 programs.

The four agricultural education programs reported a total of 169 preservice students for 1984-85 with 56 of them being seniors or others (generally graduate students earning certification) who would be expected to go into the teacher pool in 1985. Eighty-eight students were reported as enrolled in a graduate program. Western Kentucky University reported the highest number of preservice as well as graduate students for 1984-85.

A total of 308 graduates who had also applied for teaching certificates were reported for the last five years. The University of Kentucky and Western Kentucky University reported the highest numbers of undergraduate and graduate program completions during that period.

Of that group of 308 graduates from 1979 to 1984, 124 or 40.3 %, were employed in 1985 in a job requiring a teaching certificate. At the same time only 46 "new hires" were reported during that time period in the data on reimbursed teachers of agriculture. A few more were probably hired for state-operated positions.

Table 37

Present Employment of Agriculture Teacher Education Graduates from 1979-80 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate school, armed services, unemployed		Don't Know		Total graduates applying for certificate	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Ky University												
Ky State University												
Morehead State U	26	56.5	12	26.1	2	4.3	5	10.9	1	2.2	46	100.0
Murray State U	35	50.0	28	40.0	4	5.7	2	2.9	1	1.4	70	100.0
Northern Ky University												
University of Ky	25	26.1	38	39.6	15	15.6	5	5.2	13	13.5	96	100.0
University of Louisville												
Western Ky University	38	39.6	40	41.6	5	5.2	11	11.5	2	2.1	96	100.0
Total	124	40.3	118	38.3	26	8.4	23	7.5	17	5.5	308	100.0

It would appear that the present Kentucky agricultural education system produces more teachers of agriculture than can by hired by the schools. Considering the discrepancy between 46 "new hires" from 1980-81 through 1984-85 and 124 graduates from those years who were "employed in jobs requiring certification," it appears that some are finding teaching jobs in other states or in other fields. At the same time, a large share are employed in non-certified jobs or, presumably, not in teaching jobs. The number of these who would like to find teaching positions is not known.

Business and Office Teachers

The typical business teacher is a female who is almost forty years old with almost fourteen years of teaching experience, and is most likely to teach in a reimbursed program. She probably holds a Rank II certificate with a master's degree which she earned at one of the state universities.

Number of Teachers

Business and office teachers comprise the largest group of vocational teachers in Kentucky. In 1984-85 they numbered approximately 915 persons teaching the various subject areas within business and office education. Regional directors reported 152 business teachers in state-operated programs. PSD data reported 763 vocational business and office teachers in reimbursed programs. These totals, along with regional figures, are shown in Table 38.

Also of interest in any count of business and office teachers is the cohort of 106 non-vocational business and office teachers in the secondary schools. While not a part of the vocational, reimbursed group of teachers, many of these teachers hold vocational certification and constitute a pool of potential vocational teachers. Even those who do not hold vocational certification may be close to attaining such certification if they should so desire. The regional location of these teachers in 1984-85 is shown in Table 38. Not included in any of the data presented were six non-vocational elementary business education teachers in Regions 2, 4, 6, and 12.

Table 39 records the number of state-employed teachers in each region teaching in specific O.E.-designated program areas. About two-thirds, or 107, of the 152 state-employed teachers reported teaching either clerical or secretarial courses. The rest of the teachers reporting ranged over five program titles. While some teachers listed more than one program title, due to tabulation limitations only the first program title listed could be recorded.

Age and Experience

In 1984-85 the average business and office teacher was 39.8 years old and had taught for 13.8 years. The mean ages for each region are shown in Table 40. The average experience is shown similarly in Table 41.

Examination of Tables 40 and 41 may give some indication of potential retirements statewide and in individual regions. For example, twenty-two business teachers were 61 or older, and 34 more

Table 38

Numbers of Business Teachers in Kentucky in 1984-85, by Type of Teacher and Vocational Region

Type of Teacher	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Vocational: Reimbursed	32	54	31	40	43	159	93	22	34	52	8	70	25	100	763
State-Employed	12	5	10	11	10	14	10	11	6	13	19	10	18	17	166
Sub-Total	44	59	41	51	53	173	103	33	40	65	27	80	43	117	929
Non-Vocational (Secondary)	11	4	11	9	2	2	5	7	3	3	12	10	7	20	106
Total	55	63	52	60	55	175	108	40	43	68	39	90	50	137	1035

Table 39

Numbers of State-Employed Vocational Business Teachers Under Each Program Title for Each Vocational Region

Program Titles and O.E. Codes	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
B.O. Education 14.0000	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Accounting Management 14.0100	3	1	1	1	1	2	1	0	0	2	0	3	3	3	21
Data Processing 14.0200	0	1	0	0	0	2	2	0	0	3	0	0	3	1	12
Clerical 14.0300	3	1	2	7	4	4	3	4	3	3	9	3	5	4	55
Exploratory B&O 14.0350	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Word Processing 14.0400	1	0	1	0	1	3	2	0	0	0	0	0	0	2	10
Secretarial 14.0700	4	2	4	3	2	3	1	5	2	5	9	1	7	4	52
Unknown	1	0	2	0	2	0	1	1	1	0	1	3	0	2	14
Totals	12	5	10	11	10	14	10	11	6	13	19	10	18	17	166

Table 40

Ages of 1984-85 Vocational Business Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	3	2	1	2	5	2	1	0	0	0	4	1	2	23	2.5
26-30	1	1	2	7	6	1	13	5	3	4	0	9	1	9	62	6.7
31-35	1	15	8	5	9	20	17	5	7	16	7	13	8	18	149	16.0
36-40	14	15	8	13	7	51	30	5	9	18	7	16	13	24	230	24.8
41-45	11	8	8	10	6	33	17	6	8	9	4	18	9	17	164	17.7
46-50	6	7	6	8	13	29	7	3	5	5	3	6	7	18	123	13.2
51-55	3	4	1	3	5	13	10	5	3	10	3	6	2	17	85	9.1
56-60	3	3	2	3	2	6	1	1	2	1	0	4	2	4	34	3.7
61-65	0	1	1	1	0	5	4	1	1	0	1	0	0	1	16	1.7
65+	0	1	0	0	1	2	1	0	0	0	0	0	0	1	6	0.6
Unknown	5	1	3	0	2	8	1	1	2	2	2	4	0	6	37	4.0
Total	44	59	41	51	53	173	103	33	40	65	27	80	43	117	929	100.0
Mean Age	42.8	40.3	39.3	40.4	41.1	42.6	39.1	39.9	41.1	39.9	41.0	39.4	40.1	41.8	39.8	

Table 41

Years of Experience of 1984-85 Vocational Business Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	2	3	1	2	2	3	2	2	0	4	0	1	1	1	24	2.6
1-4	2	2	4	3	6	5	11	1	3	5	0	10	2	11	65	7.0
5-9	2	13	9	8	7	12	18	7	10	15	4	13	5	17	140	15.1
10-14	9	15	8	14	14	52	33	8	6	12	12	20	12	35	250	26.9
15-19	19	11	6	11	10	57	20	6	9	14	3	13	13	21	213	22.9
20-24	3	9	7	6	6	32	9	3	6	7	1	12	7	12	120	12.9
25-29	5	3	3	6	5	9	8	3	1	7	5	6	2	10	73	7.9
30-34	1	2	1	0	0	3	1	2	4	1	1	2	1	6	25	2.7
35-39	0	1	0	1	0	0	0	0	0	0	0	0	0	1	3	0.3
40-44	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0.2
Unknown	1	0	2	0	2	0	1	1	1	0	1	3	0	2	14	1.5
Total	44	59	41	51	53	173	103	33	40	65	27	80	43	117	929	100.0
Mean Years of Experience	15.9	13.4	13.5	14.2	13.3	15.6	12.1	13.8	15.1	13.2	15.9	13.5	14.5	14.0	13.8	

were in the 56-60 age group. Thirty teachers had taught 30 years or more and would be considered eligible for retirement. Seventy-three more teachers had taught 25-29 years and might be expected to be considering retirement in a few years.

Teacher Turnover

In 1984-85 the new hire rate (the percentage of teachers who were in their first year of teaching) for all vocational Kentucky business teachers was 2.6 percent (Table 41.) Statewide new hire data over the past five years for reimbursed and non-vocational teachers (Table 42) indicates that the new hire rate remained fairly constant and fairly low for this group over the last few years. At the same time, more first-year reimbursed and non-vocational business and office teachers were hired in 1984-85 than in any of the five previous years.

During the last five years the numbers of vocational reimbursed teachers appear to have increased considerably (Table 42.) However, when one looks at the total business and office education cohort of secondary non-vocational teachers plus the secondary vocational teachers (also in Table 42,) one sees less change in total numbers. Due to funding changes, a number of non-vocational business education programs that were already in place and that met certain requirements were picked up under vocational funding. Therefore, the increase in vocational business and office teachers represented a shift in funding rather than a large increase in the overall pool of business and office teachers.

Rank

Over the past five years the percentage of Rank I reimbursed business and office teachers has steadily increased, and the percentages of Rank II and Rank III reimbursed teachers have declined (Table 43.) During the 1984-85 school year 27.5% of the reimbursed teachers held Rank I certificates while 51% held Rank II certificates.

Regional rank distributions for all 1984-85 business teachers are also shown in Table 44. Individual universities may want to plan educational efforts in relation to regional needs as indicated.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were also asked to indicate the highest degree or certificate they had completed. Results are reported in Table 45 along with degree goals. While that information was not directly available from reimbursed teacher data, the ranking system for these teachers is such that earning a Rank I certificate indicates completion of a master's degree plus 30 hours, and a Rank II equals a master's degree or planned 5th year program. Therefore, rank

Table 42

New Hire Rate for Kentucky Reimbursed and Non-Vocational Business and Office Teachers, 1980-1985

YEAR	Secondary Non-Vocational Teachers n	Secondary Non-Vocational Teachers New Hires	Secondary Non-Vocational Teachers % (New Hire Rate)	Reimbursed Teachers n	Reimbursed Teachers New Hires	Reimbursed Teachers % (New Hire Rate)	Total n	Total New Hires	Total % (New Hire Rate)
1980-81	232	6	2.6	577	9	1.6	809	15	1.9
1981-82	222	1	0.5	573	6	1.1	795	7	0.9
1982-83	173	2	1.2	641	14	2.3	814	16	2.0
1983-84	115	1	0.9	763	15	2.0	878	16	1.8
1984-85	106	7	6.6	763	16	2.1	869	23	2.7

Table 43

Ranks and Percentages of Kentucky Reimbursed Vocational Business Teachers, 1980-85

Year	Rank I n	Rank I %	Rank II n	Rank II %	Rank III n	Rank III %	Total
1980-81	98	17.0	316	54.8	163	28.3	577
1981-82	128	22.3	303	52.9	142	24.8	573
1982-83	148	23.1	335	52.3	158	24.7	641
1983-84	199	26.1	392	51.4	172	22.5	763
1984-85	210	27.5	389	51.0	164	21.5	763

Table 44

Ranks of Kentucky Vocational Business Teachers, 1984-85, for All Regions

Rank Level	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Statewide Totals
Rank I															
Teachers	15	19	7	18	16	43	14	6	6	15	9	32	10	27	237
%	34.1	32.2	17.1	35.3	30.2	24.9	13.6	18.2	15.0	23.1	33.3	40.0	23.3	23.1	25.5
Rank II															
Teachers	21	29	23	22	22	102	62	17	17	35	13	29	27	59	478
%	47.7	49.2	56.1	43.1	41.5	59.0	60.2	51.5	42.5	53.9	48.2	36.3	62.8	50.4	51.5
Rank III															
Teachers	6	11	9	11	13	28	26	9	16	14	3	16	6	29	197
%	13.6	18.6	22.0	21.6	24.5	16.2	25.2	27.3	40.0	21.5	11.1	20.0	14.0	24.8	21.2
Unknown															
Teachers	2	0	2	0	2	0	1	1	1	1	2	3	0	2	17
%	4.6	0.0	4.9	0.0	3.8	0.0	1.0	3.0	2.5	1.5	7.4	3.8	0.0	1.7	1.8
Total Teachers	44	59	41	51	53	173	103	33	40	65	27	80	43	117	929

Table 45

Degree Goals of 1984-85 State-Employed Business Teachers, Distributed in Relation to Highest Degree Presently Held

Highest Degree/ Certificate Presently Held	Degree/Certificate Goal								Total
	64 Hr.	Bachelor's	5th Yr.	Master's	Master's +30	Doctor-ate	Other	No Resp/ Unknown	
None	2	0	0	0	0	0	0	0	2
24 Hr.	0	1	0	0	0	0	0	1	2
64 Hr.	1	2	0	0	0	0	0	0	3
Bachelor's	0	6	0	12	9	2	0	6	35
5th Year	0	0	4	0	2	0	0	1	7
Master's	0	0	0	23	28	2	1	23	77
Master's +30	0	0	0	0	6	3	1	10	20
Other	0	0	0	0	1	0	1	0	2
No Response/ Unknown	0	2	0	1	0	1	0	14	18
Total	3	11	4	36	46	8	3	55	166

information in Table 43 and Table 44 can be assumed to also reflect the highest degree held by business teachers across the state. Given that assumption, over three-fourths of the Kentucky business and office education teachers held the equivalent of a master's degree or higher.

Both the PSD form and the VTDF survey requested information about the institution from which teachers received their highest or most recent degree or certificate. As seen in Table 46, approximately 80% of all reporting business teachers reported receiving their highest or most recent degree from one of Kentucky's state universities, with Western Kentucky University and Eastern Kentucky University awarding the highest numbers of recent degrees or certificates.

A number of business and office teachers also received their highest or most recent degree or certification from schools other than the state universities. Among the in-state independent schools awarding such degrees, Union College serving Region 13 stands out. Out of state schools appeared to be especially popular in Regions 6 and 7, both regions with large numbers of teachers very near the state line, and presumably near such out of state schools as the University of Cincinnati or Xavier in Ohio.

Information regarding the regions served by each university is provided in Table 46. Because many of the highest/most recent degrees were graduate degrees earned while also teaching full time, it is not surprising to find that the large portion of graduates from any university tended to be currently employed in the same region where the university is located or in one of the bordering regions. At the same time, Eastern Kentucky University, Morehead State University, Murray State University, the University of Kentucky, and Western Kentucky University each had graduates in two or more regions other than those immediately surrounding the university.

Present Enrollment in Higher Education

State-employed teachers were asked if they were presently enrolled in some university program and, if so, where it was. Of the 152 reporting state-employed business teachers 112, or about two-thirds of them, did not respond, presumably indicating that they were not currently enrolled in any program. Of the thirty-seven teachers who said they were enrolled, fifteen were enrolled in a master's program, and sixteen were enrolled in a master's-plus-30-hours program. Two were in a 64-hour program, one in a bachelor's program, and one in a fifth year program. Three indicated enrollment in "Other."

The universities with the highest numbers of state-employed enrollees were Morehead State University with eight enrollees, Murray State University with nine enrollees, and Western Kentucky University

Table 46

Institutions Where 1984-85 Kentucky Business Teachers Received Their Highest or Most Recently Completed Degree or Certificate

Institution	Vocational Regions														Total.	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	0	0	3	22	20	1	7	9	11	27	12	46	158	17.0
Kentucky State University	0	1	0	0	0	2	2	0	0	0	0	1	0	4	10	1.1
Morehead State University	0	1	0	0	1	5	8	26	26	37	10	1	0	6	121	13.0
Murray State University	37	36	9	1	2	8	1	0	0	0	0	0	0	1	95	10.2
Northern Ky University	0	0	0	0	0	0	33	0	0	0	0	0	0	0	33	3.6
University of Kentucky	0	2	4	0	6	17	6	3	0	3	3	1	8	43	96	10.3
University of Louisville	0	0	0	0	3	52	2	0	0	0	0	0	0	0	57	6.1
Western Ky University	1	13	19	46	26	44	2	0	1	0	0	0	13	1	166	17.9
Other Schools In-State	1	2	4	3	6	8	7	1	1	15	2	45	7	11	113	12.2
Other Schools Out-of-State	3	4	3	1	4	14	20	1	4	0	0	2	2	3	61	6.6
No Response/ No Degree	1	0	0	0	0	1	1	0	0	1	0	0	1	0	5	0.5
Unknown	1	0	2	0	2	0	1	1	1	0	1	3	0	2	14	1.5
Total	44	59	41	51	53	173	103	33	40	65	27	80	43	117	929	100.0

with nine enrollees.

Degree Goals

State-employed business teachers were asked to specify degree goals. Responses regarding degree goals in relation to the highest degree presently held, or "how far one has yet to go," are shown in Table 45.

It would appear that many of the teachers responding planned further education. Of 152 state-employed teachers, 63 indicated that they had degree goals higher than the level they had already attained. A master's-plus-30 was cited as the goal by 28 teachers who had not yet attained that level. A large number of those whose answers indicated no further educational plans had earned a master's degree.

Both the degree presently held and the degree goal were necessary to properly answer this question. However, 41 teachers failed to respond with a goal, and four teachers did not list a highest degree presently held. It should also be noted again that this data included only state-employed teachers.

Institution and Location of First Job

In examining sources of the teacher supply, one can look at where teachers graduate as well as where they accept positions after completing their first (usually undergraduate) degree. While these data were available for all state-employed teachers, they were included in this report only for service areas such as business education that had large enough groups of state-employed teachers to be somewhat representative.

Twenty five state-employed business teachers claimed Eastern Kentucky University for their first degree with twenty-three claiming Morehead State University. Western Kentucky University and the University of Kentucky were claimed by 19 and 18 teachers, respectively. All state universities were listed as having at least one or more graduates (Table 47.)

A surprisingly large number (30.9%) of business teachers claimed either out-of-state schools or in-state schools other than the state universities. Thirty -three state-employed business teachers spread across almost all regions cited an independent Kentucky college as the source of the first degree. It would appear that the Kentucky independent colleges play a considerably larger role in the education of Kentucky business teachers than in the education of other vocational teachers.

Of this group, 78 who had attended state universities found their first job in the same or a bordering region where they received their first degree. Sixteen took their first jobs further away from

Table 47

Location (Region) of First Job in Relation to Institute Awarding First Degree or Certificate: State-Employed 1984-85 Business Teachers

Institution	Vocational Regions														No Response	Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15		
Eastern Kentucky University	0	0	0	0	0	3	1	0	1	3	5	1	4	6	1	25
Kentucky State University	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Morehead State University	0	0	0	0	0	1	2	8	1	6	5	0	0	0	0	23
Murray State University	5	1	2	0	1	1	0	0	0	0	0	0	0	0	1	11
Northern Ky University	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
University of Kentucky	0	0	1	0	2	1	2	0	1	1	0	0	1	5	4	18
University of Louisville	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Western Ky University	0	2	1	6	3	2	0	0	0	0	0	1	3	0	1	19
Other Schools In-State	1	2	2	1	1	0	2	2	0	1	7	5	6	2	1	33
Other Schools Out-of-State	1	1	0	1	2	3	0	0	0	0	0	1	1	1	3	14
Unknown	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	4

the university. It would appear that, for whatever reasons, a large number of teachers took first jobs in the general area where they received their first degree.

Business Teacher Education

Historical Perspective

Business education in the broader scope had its roots and inception in the early private business schools of the Commonwealth. The old Fugazzi Business School in Lexington, Sullivan and Spencerian Business Schools in Louisville were schools started early in this century to provide training for the office work world. Many of the early teachers of business subjects at the secondary level acquired their content background in such schools. Business teacher training, however, had its genesis in the old Bowling Green Business University which was the first business school to prepare office workers and teachers. This school was an accredited (several years prior to 1925) four-year institution whose history dated back to the late 19th century. During the early 1900s, content courses and one methods course were known to have been offered. Later, the content courses were taken at Bowling Green Business University, and methods courses were taken at Western State University. This joint effort was discontinued in 1963 when the content courses from the old business school became embodied in Western's initial business teacher training program.

The first formalized program for business teacher education among the state universities of the Commonwealth was started at Eastern Kentucky University in 1926 with the organization of the Department of Commerce headed by Dr. Armond J. Lawrence. In the early years, Miss Edith Ford, Miss Anna D. Gill, and Dr. R. R. Richards provided content instruction, if not methods as well. They were followed by Miss Margaret Moberly and Mr. Edsel Mountz. Later came Dr. Alfred Patrick, Miss Ruth McCann, and Dr. Rosalie Roy.

In 1930, Dr. Armond J. Lawrence left Eastern and joined the old College of Commerce at the University of Kentucky and might well be recognized as "the father of business teacher education in Kentucky." Dr. Lawrence held joint appointments in the Colleges of Commerce and Education. He formalized business teacher training during the years 1930-1934. He along with Hollis Guy, Dr. Leslie Betts, Miss Margaret Bell Humphreys, Dr. Ruth E. Thomas, and Dr. David C. McMurtry were the first teacher trainers at the University of Kentucky. Summer conferences and workshops were begun in the mid-1930s to provide inservice training for teachers. In 1948, Dr. Vernon A. Musselman became the chief teacher trainer. He continued the summer conferences and developed a close working relationship with the State Department of Education in Frankfort.

Other teacher training personnel at the University who played major roles in the 1960s, 1970s, and 1980s were Dr. John Alvin Dickinson, Dr. Robert Driska, Dr. Ray D. Bernardi, Dr. Kawanna J. Simpson, and Dr. Elaine F. Uthe. Dr. Simpson is at present (1985) coordinator of business teacher training within the University and serves as liason with the Business Education Section of the State Department's Vocational Education Division in Frankfort.

Business teacher education was first offered at Murray State University in 1935. The program was commenced under the leadership of Fred M. Gingles. Early business teacher training faculty at Murray were Austin S. Bratcher, Garland A. Murphy, L. C. Fowler, Vernon Anderson, Verda H. Happy, and Dr. Thomas B. Hogancamp. Later faculty connected with business teacher training were Dr. John Divine, Dr. Alberta Chapman, Mrs. Ryan, and Dr. Jules Harcourt.

Dr. Renzie W. Jennings started business teacher education at Morehead State University about 1940. Early faculty were Alice Cox, Mary Martin Crisp, and Dr. Holley Sharp. Later business teacher educators included Dr. George Montgomery, Ernest Hinson, and Dr. Mildred Quinn Hickman.

In 1946, business teacher education for the University of Louisville came under the leadership of Dr. Kathleen Drummond who more recently has been joined by Dr. Randy Wells. The program at Louisville had been initiated one year earlier but was formalized by Dr. Drummond.

Business teacher education at Western State University began many years prior to 1963 but was formalized in that year when the content courses of the old Bowling Green Business University became absorbed by Western. This content-methods joint effort was begun by Mary Martin Crisp and Dr. Holley Sharp.

No specific information is available for the beginning of business eacher education at Kentucky State University. However, it has been a part of the curriculum in the last two decades and is now under the leadership of Dr. Leola Madison Travis.

Business teacher education at Northern Kentucky University, the newest of Kentucky's eight state universities, was initiated in the early 1970s. The first baccalaureate degrees were awarded in 1973. the first teacher training faculty there were Dr. Kenneth Carter and Dr. C. B. Steigler.

Business teacher education existed also in private four-year liberal arts colleges. As early as 1940, it was possible to become certified as a business teacher from Georgetown College. Other private colleges such as Berea, Union, Cumberland, and Campbellsville have in the last forty years made provision in their curriculums for business teacher education.

Since the early 1970s all eight of Kentucky's state universities have offered business education programs. Table 48 illustrates the chronological development of these programs. The geographic locations of these programs is portrayed in Figure 4.

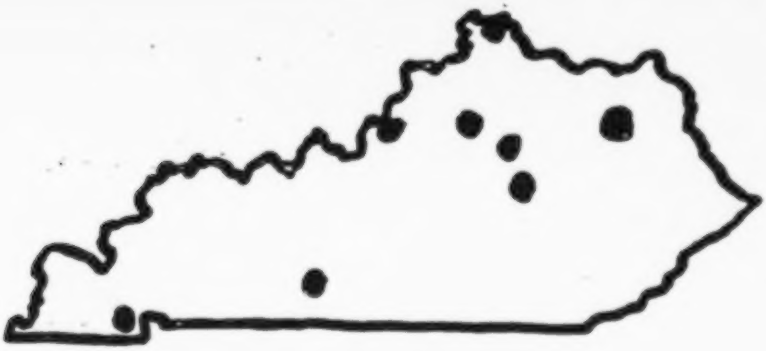

Figure 4

Location of Business Teacher Education Programs in Kentucky State Universities

Besides these state programs, Bellarmine, Berea, Brescia, Campbellsville, Cumberland, Pikeville, and Union Colleges presently offer business education programs. While these programs are not designated as vocational, graduates who also meet work experience requirements established by the Office of Vocational Education may apply for vocational certification.

Table 48

Chronological Development of Vocational Business Teacher Education in Kentucky

Date	Institution
Early 1900s	Bowling Green Business University
1926	Eastern Kentucky University
1930	University of Kentucky
1935	Murray State University
1940	Morehead State University
1945-46	University of Louisville
1963	Western Kentucky University (formalized program; discontinued joint effort with Bowling Green Business University)
1960s	Kentucky State University
Early 1970s	Northern Kentucky University

Enrollment Patterns

Business teacher educators were asked to describe a typical enrollment pattern for their students. Enrollment patterns affect total enrollment figures, as freshmen may be counted in some programs, while in other programs freshmen are not yet enrolled and, therefore, not counted.

Eastern Kentucky University. Students enroll in four years of business education.

Kentucky State University. Prior to the fall of 1983, students enrolled in the University and registered in the School of Business, declaring Business Education as their major. Since 1983 students have been under a different advisement process whereby their major is not declared until the end of the sophomore year.

Morehead State University. Students may enroll in a teacher education program upon admission, provided they meet all of the requirements.

Murray State University. Students enroll in Business Education as freshmen or transfer to the program from some other program at a later time.

Northern Kentucky University. Students either enter a four-year B.S. Degree program with a major in Business Education, or they enter a two-year Associate Degree program and then transfer into Business Education.

University of Kentucky. Most students transfer into the program late in their sophomore year or early in their junior year. A large percentage transfer in from community colleges.

University of Louisville. Students are enrolled in the College of Arts and Sciences for the first 51 hours after which they apply for admission to the School of Business. All students are majors in the School of Business. Professional education courses are added on for those seeking certification.

Western Kentucky University. Students enrolled in Business Education begin their business content courses in the freshman year and professional education courses in their sophomore year. By the end of the sophomore year, the students apply officially for admission to the College of Business Administration and the College of Education.

Faculty

Teacher educators in business education were asked to report the numbers of full time and part time faculty members in business education over the past five years. They also reported the highest degree held by the person, as well as whether or not they had K-12 experience. Unless other information was provided, faculty members reported for 1979-1984 were recorded as 1 FTE if full time and 0.5 FTE if part time. However, for most of the 1984-85 faculty a more precise percentage was provided by the teacher educators. If this was not available, then 1 FTE and 0.5 FTE were used for full time and part time.

A composite of these faculty time equivalents calculated from the data provided is presented in Table 49. More detailed data for 1984-85 faculty in Kentucky business education is then presented in Table 50. Examination of these tables reveals that the numbers of faculty in business teacher education have dropped over the past six years from a total of 25 people to 22.5 people in 1984-85.

It must be noted that part-time personnel may or may not have been full time employees of the university. In some cases they were half time graduate assistants or instructors. In other cases they were full time faculty members who were teaching vocational teacher education part of the time and content courses part of the time. For the sake of precision, in as many cases as possible, specific percentages of time spent in vocational teacher education were requested for the data in Table 50, but render Tables 49 and 50 noncomparable regarding FTE figures.

It is also possible that the universities used different standards in determining numbers of faculty. Some may have included all business faculty regardless of whether or not they were involved in the teacher education portion. Others may have sorted out only those who were directly involved in teacher education activities.

Enrollment and Output

Undergraduate or preservice class enrollment figures reported by each business education department in the state universities are reported in Table 51. Although totals for each university are shown, it must be noted that some institutions do not list freshmen or sophomores, depending on when students take vocational teacher education courses or officially become business education majors. Therefore, comparison of university totals would not be appropriate.

Examination of Table 51 reveals a total of 53 seniors in 1984-85 who could be expected to enter the teacher pool. Besides these, 16 more were recorded as "Other." While not specified, "Other" was often used to represent graduated students who had returned to earn teaching certification and who, therefore, would be a part of the teacher pool in 1985.

Four independent colleges (Bellarmine, Berea, Campbellsville,

Table 49

Business Education Faculty and Full-Time Equivalents[a] (FTEs): 1979-84

Institution	1979-1980		1980-1981		1981-1982		1982-1983		1983-1984	
	n	FTE	*n*	FTE	*n*	FTE	*n*	FTE	*n*	FTE
Eastern Kentucky University	1	1.0	1	1.0	1	1.0	1	1.00	1	1.0
Kentucky State University	4	3.5	4	3,5	4	3.5	3	2.50	3	2.5
Morehead State University	6	6.0	6	6.0	5	5.0	4	4.00	3.5	3.5
Murray State University	6	6.0	6	6.0	5	5.0	5	5.00	5	5.0
Northern Ky. University	2	2.0	2	2.0	2	2.0	2	2.00	1	1.0
University of Kentucky	2	2.0	2	2.0	2	2.0	2	2.00	5	4.5
University of Louisville	1	1.0	1	1.0	1	1.0	1	1.00	1	1.0
Western Kentucky University	3	2.0	3	2.0	3	2.0	3	1.75	3	2.0
Total	25	23.5	25	23.5	23	21.5	21	19.25	22.5	20.5

[a] Based on: Full time all year = 1; Part-time all year = 0.5

Table 50

Business Education Faculty Degrees, FTEs and K-12 Experience; 1984-85

Institution	Highest Degree BA/BS	MA/MS	Doct.	Total n	FTE	Number with K-12 experience
Eastern Ky. University	0	1	1	2	1.3	1
Kentucky State University	0	2	1	3	1.5	2
Morehead State University	0	0	3	3	2.10	0
Murray State University	0	1	4	5	4.80	0
Northern Ky. University	0	1	1	2	1.5	1
University of Kentucky	2	2	1	5	1.8	2
University of Louisville	0	0	1	1	1.0	0
Western Ky. University	0	3	5	8	0.95	a
Total	2	10	17	29	14.95	6

[a] Data not available

Table 51

Preservice Enrollments for 1984-85 in Business Education

Institution	Freshmen		Sophomores		Juniors		Seniors		Other	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	4	21.1	5	12.2	5	8.2	13	24.5	2	12.5
Kentucky State University	[a]		2	4.9	1	1.6	1	1.9	2	12.5
Morehead State University	[b]		[b]		[b]		[b]		[b]	
Murray State University	10	52.6	15	36.6	20	32.8	10	18.9	0	0.0
Northern Kentucky University	3	15.8	5	12.2	9	14.8	14	26.4	1	6.25
University of Kentucky	2	10.5	8	19.5	10	16.4	1	1.9	2	12.5
University of Louisville	[a]		[a]		10	16.4	1	1.9	9	56.25
Western Kentucky University	[a]		6	14.6	6	9.8	13	24.5	0	0.0
Total	19	100.0	41	100.0	61	100.0	53	100.0	16	100.0

[a] Major not yet declared

[b] Information not available

and Pikeville) responded to an abbreviated form of the teacher education survey. They reported a total of two freshmen, five sophomores, eleven juniors, and thirteen seniors currently enrolled in some course in teacher education in 1984-85. The thirteen seniors might or might not enter the vocational teacher pool in 1985-86.

Teacher educators were asked to indicate numbers of graduates from the undergraduate program. Over the years covered by the survey, 1979-1984, a total of 334 students graduated from business education programs in Kentucky state universities (Table 52.) This did not include the considerable number of students who majored in business and office programs but did not take the education option. These students often constitute part of the teaching load of business teacher education faculty, especially when they teach content courses as part of their teaching load. At the same time, these non-education majors are not part of the potential teacher pool and, therefore, were not counted in this survey.

Teacher educators were also asked to report how many of the business education graduates actually applied for teaching certificates. Because teaching certificates are generally applied for through some office other than the program area office, teacher educators do not always have precise numbers regarding how many qualified students actually applied. However, to the best of their knowledge, they reported that a total of 331 of the 334 students from 1979 to 1984 applied for teaching certificates.

The total numbers of preservice graduates show considerable decline from 1979-80 to 1983-84. In 1979-80, 91 students graduated in business education. In 1982-83 and 1983-84 only 52 and 53 graduates, respectively, were reported.

The three reporting independent colleges also gave numbers of teacher education graduates over the past five years:

1979-80: 4 graduates
1980-81: 4 graduates
1981-82: 2 graduates
1982-83: 3 graduates
1983-84: 7 graduates

While these students graduated in business teacher education they may or may not have qualified for or sought certification in vocational teacher education.

The numbers of students who enrolled in some course in the business education program at each post-baccalaureate level are shown in Table 53. The largest proportion of graduate students were enrolled in master's degree programs. No specialist or doctorate students were recorded here as they would be enrolled and recorded in a general education or vocational education category.

Table 52

Kentucky Business Education Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating		Total Applying for Certificate
	n	%	n	%	n	%	n	%	n	%	n	%	n
Eastern Kentucky University	13	14.3	17	23.0	15	23.4	6	11.5	7	13.2	58	17.4	57
Kentucky State University	1	1.1	0	0.0	2	3.1	0	0.0	1	1.9	4	1.2	2
Morehead State University	29	31.8	19	25.7	8	12.5	11	21.2	7	13.2	74	22.2	74
Murray State University	7	7.7	10.	13.5	5	7.8	7	13.4	11	20.8	40	11.9	40
Northern Kentucky University	5	5.5	7	9.4	8	12.5	8	15.4	7	13.2	35	10.4	35
University of Kentucky	19	20.9	12	16.2	11	17.2	11	21.2	10	18.9	63	18.9	63
University of Louisville	4	4.4	2	2.7	3	4.7	4	7.7	4	7.5	17	5.1	17
Western Kentucky University	13	14.3	7	9.5	12	18.8	5	9.6	6	11.3	43	12.9	43
Total	91	100.0	74	100.0	64	100.0	52	100.0	53	100.0	334	100.0	331

Table 53

Business Education Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Institution	Level: 5th Year n	5th Year %	M.A./M.S. n	M.A./M.S. %	Rank I n	Rank I %	Total n	Total %
Eastern Kentucky University	2	16.7	15	17.4	1	4.8	18	15.1
Kentucky State University [a]								
Morehead State University	0	0.0	13	15.1	0	0.0	13	10.9
Murray State University	5	41.7	20	23.3	10	47.6	35	29.4
Northern Kentucky University	2	16.7	18	20.9	0	0.0	20	16.8
University of Kentucky [b]								
University of Louisville	3	25.0	20	23.3	10	47.6	33	27.8
Western Kentucky University [c]								
Total	12	100.1	86	100.0	21	100.0	119	100.0

[a] Not applicable

[b] Not available

[c] Can major in education and minor in business

Teacher educators were also asked to record the number of graduate students they considered to be enrolled in one of their post-baccalaureate programs regardless of whether or not they had taken a course during 1984-85. This data is reported in Table 54. As can be seen in a comparison with Table 53, most schools reported more students "in the pipeline" of some program than had actually taken a course during 1984-85. The largest numbers of graduate students were enrolled in master's degree programs. A considerable number were also enrolled in Rank I programs (Master's plus 30 hours).

Numbers of post-baccalaureate graduations or completions from the post-baccalaureate programs were also requested. Some of the business education programs enroll their graduate students under other programs, such as secondary education. Of the schools reporting, however, a total of 218 master's degrees or fifth year completions were reported over the years 1979-80 to 1983-84 (Table 55.) There were also 52 Rank I or specialist completions as well as seven doctorates completed, making a total of 277 graduate degree or program completions in the five years. (These could include duplications if, for example, someone earned both a master's and a Rank I in that time period.)

The decline in undergraduates was somewhat matched by a decline in graduate students, especially in master's degree people. At the same time, numbers of graduates from Rank I/Specialist programs remained relatively stable over the same years.

Follow-Up of Graduates

In order to see what graduates of a program do and, especially, how many go into teaching, program heads were asked about current employment of graduates from the last five years. Responses are presented in Table 56. While only 28.4 % were known to be teaching, the status of a large number was unknown.

Potential Program Changes

The program heads were asked to comment if they were aware of any potential changes in their programs. The faculty at two of the universities gave the following responses.

At Morehead State University an organizational change has occurred. "Business Education has been a part of the Department of Information Sciences, located in the School of Business and Economics.

"The new administration has now eliminated the Department of Information Sciences and the School of Business and Economics and has formed a program area of Information Sciences and a Department of Business and Economics, with only one department head where there had been three......"

Table 54

Business Education Students Enrolled in a Post-Baccalaureate Program: 1984-85

Institution	5th Year		M.A./M.S.		Rank I		Total	
	n	%	n	%	n	%	n	%
Eastern Kentucky University	3	37.5	20	18.4	5	15.6	28	18.8
Kentucky State University[a]								
Morehead State University	0	0.0	13	11.9	4	12.5	17	11.4
Murray State University	0	0.0	5	4.6	5	15.6	10	6.7
Northern Kentucky University[b]								
University of Kentucky	1	12.5	35	32.1	6	18.8	42	28.2
University of Louisville	4	50.0	30	27.5	10	31.2	44	29.5
Western Kentucky University	0	0.0	6	5.5	2	6.3	8	5.4
Total	8	100.0	109	100.0	32	100.0	149	100.0

Level (spanning 5th Year, M.A./M.S. and Rank I)

[a] Not applicable

[b] Graduate students enrolled in Department of Education

Table 55

Graduate Program Completions in Business Education

Institution	1979-80			1980-81			1981-82			1982-83			1983-84			Sub-Total			Total	
	5th/M	RI/Sp	Doc	5th/M	RI/Sp	Doc	5th/M	RI/Sp	Doc	5th/M	RI/Sp	Doc	5th/M	RI/Sp	Doc	5th/M	RI/Sp	Doc	n	%
Eastern Kentucky University	10	1	0	10	2	0	5	5	0	4	1	0	3	1	0	32	10	0	42	15.2
Kentucky State University																				
Morehead State University	15	0	0	1	0	0	6	0	0	4	0	0	6	0	0	32	0	0	32	11.5
Murray State University	6	6	0	5	5	0	2	1	0	3	2	0	4	3	0	20	17	0	37	13.4
Northern Kentucky University [a]																				
University of Kentucky	13	3	2	6	1	2	8	2	2	3	3	1	0	2	0	30	11	7	48	17.3
University of Louisville	15	3	0	13	2	0	13	3	0	15	2	0	17	4	0	73	14	0	87	31.4
Western Kentucky University	12	0	0	5	0	0	3	0	0	5	0	0	6	0	0	31	0	0	31	11.2
Total	71	13	2	40	10	2	37	11	2	34	8	1	36	10	0	218	52	7	277	100.0

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[a] Data not available; graduate degree is in education, not vocational education. However, business education personnel provide advising in specialty courses.

Table 56

Present Employment of Business Education Graduates
from 1979-1980 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate School, armed services, unemployed		Don't Know		Other		Total Graduates	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	11	19.0	4	6.9	0	0.0	8	13.8	34	58.6	1	1.7	58	100.0
Kentucky State University	2	50.0	0	0.0	0	0.0	0	0.0	2	50.0	0	0.0	4	100.0
Morehead State University	0	0.0	0	0.0	0	0.0	0	0.0	74	100.0	0	0.0	74	100.0
Murray State University	22	55.0	9	22.5	4	10.0	0	0.0	5	12.5	0	0.0	40	100.0
Northern Ky. University	12	34.3	0	0.0	0	0.0	0	0.0	23	65.7	0	0.0	35	100.0
University of Kentucky	14	22.2	19	30.2	3	4.8	0	0.0	27	42.8	0	0.0	63	100.0
University of Louisville	15	88.2	0	0.0	1	5.9	0	0.0	1	5.9	0	0.0	17	100.0
Western Kentucky University	19	44.2	15	34.9	0	0.0	1	2.3	8	18.6	0	0.0	43	100.0
Total	95	28.4	47	14.1	8	2.4	9	2.7	174	52.1	1	.03	334	100.0

At the University of Kentucky they "plan to absorb Marketing and Distributive Education program into Business Education Program." They "also plan to develop and offer a non-certified Master's program in Office Administration."

Summary

In 1984-85 business teachers constituted the largest group of vocational teachers in Kentucky with 763 in reimbursed programs and 152 in state-operated programs. Another group of 106 individuals taught in non-vocational business and office programs in secondary schools.

The average teacher was almost 40 years old and had taught almost 14 years. Twenty-two teachers were 61 or older and had taught 30 years or more, thus being likely to consider retirement in the near future. Over the past five years the numbers of new teachers hired in has remained fairly low and fairly constant.

Over three-fourths of the business teachers held master's degrees or higher, as evidenced by rank and education data.

While most of the teachers received their degrees from state universities, independent colleges awarded more degrees to business teachers than to teachers in other program areas.

As indicated, business teachers have been pursuing graduate degrees. Over one-third of state-employed teachers had plans for further education. Presumably, reimbursed teachers were reasonably similar in this.

The training of business teachers has been carried on in all the state universities and in some of the independent colleges. In 1984-85, 22 faculty members with an FTE of 19.0 were involved in business teacher education in state universities. Over the years from 1979-80 to 1983-84 they graduated 334 students. In 1984-85 there were 53 seniors plus 16 others who were likely to enter the teacher pool. At least 277 graduate degree or program completions were also reported for 1979-80 to 1983-84.

While the new hire rate remained low in business education, the total number of teachers hired in remained larger than in some other program areas due to the large total cohort.

Marketing and Distributive Education

Marketing and Distributive Education Teachers

During the school year 1984-85, the typical distributive education teacher taught in a local school district rather than in a state-operated program and was about 38 years old with about eleven and a half years of teaching experience. This teacher was slightly more likely to be a male and held a Rank I or Rank II certificate, indicating he probably held a master's degree or above which he most likely earned at Murray State University or Western Kentucky University.

Number of Teachers

Records show that a total of 135 individuals were teaching distributive education in 1984-85 (Table 57.) Not all of these teachers were reported in the original VTDF survey, which was administered in early 1985, or in the PSD report which was administered in September, 1984. Eighteen teachers responded to the VTDF survey in state-operated schools, and sixty-seven teachers were reported in PSD data as teaching in local school districts. Beyond these, fifty additional teachers were reported by state department personnel, in both state-operated programs and local school districts. These fifty teachers may reflect on-going program changes, teachers also teaching in some other area and listed as such, or other unknown factors.

Given the differing count of teachers, Table 57 reflects the total count of teachers as best as could be determined. Other tables in this section generally reflect only the teachers surveyed by the VTDF survey or those included in the PSD reports, as these were the teachers on whom data were available. The fifty not surveyed are, in some cases, tabulated as "unknown" in a separate category or combined with other unknown or "no response" subjects, depending on the circumstances. It would seem likely that the surveyed teachers were reasonably representative of the unsurveyed group

Table 58 records the number of state-employed teachers in each region teaching in specific O.E.-designated program areas. Twelve of the eighteen teachers reporting were in retailing, with six other teachers spread over four program titles. Comparable information was not available for teachers in reimbursed programs.

Age and Experience

In 1984-85 the average distributive education teacher was 38.1 years old and had taught for 11.4 years. The mean ages and age distribution for each region are shown in Table 59. Average

Table 57

Numbers of Distributive Education Teachers in Kentucky, 1984-85, by Type of Teacher and Vocational Region[a]

Type of Teacher	Vocational Region														Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Reimbursed	7	10	2	8	7	24	9	3	3	4	4	8	7	11	107
State-Employed	5	0	2	4	2	3	1	0	0	4	4	0	0	3	28
Total	12	10	4	12	9	27	10	3	3	8	8	8	7	14	135

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[a] Data supplied by Bill Jeffrey, Office of Vocational Education

Table 58

Numbers of State-Employed Distributive Education Teachers in Each Vocational Region by Program Titles and O.E. Codes

Program Titles and O. E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Fashion Merchandising 04.0201	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Food Marketing 04.0600	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Hotel/Motel 04.1100	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Warehouse and Transportation 04.1900	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Retailing 04.2201	1	0	2	2	2	2	0	0	0	2	0	0	0	1	12
Unknown	2	0	0	0	0	1	1	0	0	2	4	0	0	0	10
Totals	5	0	2	4	2	3	1	0	0	4	4	0	0	3	28

Table 59

Ages of 1984-85 Distributive Education Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	0	0	1	0	1	0	0	0	1	0	0	0	1	4	3.0
26-30	0	1	1	1	1	4	0	0	0	1	0	0	0	1	10	7.4
31-35	1	2	2	1	1	3	3	0	1	0	0	0	1	1	16	11.9
36-40	5	2	0	1	3	3	2	0	0	0	1	0	0	1	18	13.3
41-45	3	1	1	1	1	2	0	2	0	3	1	1	0	0	16	11.9
46-50	0	1	0	2	0	1	0	0	0	1	0	3	1	0	9	6.6
51-55	0	0	0	1	1	1	0	0	0	0	0	0	0	1	4	3.0
56-60	1	0	0	0	0	1	1	0	1	0	0	0	0	2	6	4.4
61+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	2	3	0	4	2	11	4	1	1	2	6	4	5	7	52	38.5
Total	12	10	4	12	9	27	10	3	3	8	8	8	7	14	135	100.0
Mean Age	39.9	37	33.5	38.8	37.7	37.4	39	41	46	37.7	42	47	41	41.8	38.1	

experience and distribution of experience are shown likewise in Table 60.

Examination of Tables 59 and 60 gives some indication of a likely number of replacements needed over the next few years. For instance, no teachers of distributive education reported being over 60 years of age, but six were in the age group 56-60, and therefore approaching retirement age. In the same manner, five teachers reported having taught 25 to 29 years, and one teacher reported having taught 35 to 39 years. If programs are to continue at present strength, it appears that a few new distributive education teachers will be needed over the next few years.

Teacher Turnover

Table 60 indicates the 1984-85 new hire rate (the percentage of teachers who were in their first year of teaching) to be 5.2% for all reporting Kentucky distributive education teachers. Table 61 then presents statewide new hire data over the past five years for reimbursed teachers only. It would appear that the new hire rate remained fairly constant for this group over the last few years. It should be noted that after the numbers were compiled, reports came in of recent hiring of several distributive education personnel in a temporary, state-operated program.

Rank

Distributive education teachers tend to progress through the certification system of ranking. As shown in Table 62, since 1980-81 the percentages of Rank III and Rank II reimbursed teachers have generally declined while the numbers of Rank I teachers have steadily increased. When all reporting teachers were combined, 36.5 % held Rank I certificates, and another 41.2 % held Rank II certificates.

Regional rank distribution for all 1984-85 reporting distributive education teachers in Kentucky is shown in Table 63. Individual universities may want to plan educational efforts in relation to regional needs as indicated in this table.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were also asked to indicate the highest degree or certificate they had completed. Results are reported in Table 64 along with degree goals. That information was not directly available from reimbursed teacher data. However, the ranking system for reimbursed teachers is such that completion of Rank I indicates completion of a master's degree plus 30 hours, a Rank II equals a master's degree or planned 5th year program, and a Rank III indicates a bachelor's degree. Therefore, rank information in Tables 62 and 63 can be assumed to also reflect the highest degree held by distributive education teachers across the state. Given that

Table 60

Years of Experience of 1984-85 Distributive Education Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	0	0	0	4	0	0	0	0	0	2	0	0	0	1	7	5.2
1- 4	0	1	1	0	1	3	0	0	0	1	0	0	0	1	8	5.9
5- 9	3	0	2	1	3	2	3	0	0	0	0	0	0	2	16	11.9
10-14	5	4	0	2	1	6	2	0	1	2	0	1	2	1	27	20.0
15-19	1	1	0	2	1	2	0	2	1	0	1	0	0	0	11	8.2
20-24	0	0	1	0	1	2	1	0	0	1	1	2	0	1	10	7.4
25-29	0	1	0	0	0	1	0	0	0	0	0	1	0	2	5	3.7
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
35-39	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.7
40+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	2	3	0	3	2	11	4	1	1	2	6	4	5	6	50	37.0
Total	12	10	4	12	9	27	10	3	3	8	8	8	7	14	135	100.0
Mean Years of Experience	13.4	12.0	11.0	6.7	11.1	11.6	12.0	18.0	13.0	8.2	18.0	20.0	12.0	13.3	11.4	

Table 61

New Hire Rate for Kentucky Reimbursed Distributive Education Teachers for 1980-1985

Year	Total Teachers	0 Years Experience	
		n	% or New Hire Rate
1980-81	122	4	3.3
1981-82	111	3	2.7
1982-83	97	1	1.0
1983-84	68	1	1.5
1984-85	67	2	3.0

Table 62

Ranks and Percentages of Kentucky Reimbursed Distributive Education Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total
	n	%	n	%	n	%	n
1980-81	27	22.1	69	56.6	26	21.3	122
1981-82	29	26.1	63	56.8	19	17.1	111
1982-83	29	29.9	53	54.6	15	15.5	97
1983-84	24	35.3	36	52.9	08	11.8	68
1984-85	29	43.3	30	44.8	08	11.9	67

Table 63

Ranks Held by Kentucky Distributive Education Teachers, 1984-85, for All Regions

Rank Level	Vocational Regions														Statewide Totals
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Rank I															
Teachers	4	5	0	1	6	2	3	2	2	0	1	2	2	1	31
%	33.3	50.5	0.0	8.3	33.3	7.4	30.0	66.7	66.7	0.0	12.5	25.0	28.6	7.1	23.0
Rank II															
Teachers	5	2	2	4	1	10	3	0	0	3	1	0	0	4	35
%	41.1	20.0	50.0	33.3	11.1	37.0	30.0	0.0	0.0	37.5	0.0	0.0	0.0	28.6	25.9
Rank III															
Teachers	1	0	2	4	0	4	0	0	0	3	0	2	0	3	19
%	8.3	0.0	50.0	33.3	0.0	14.8	0.0	0.0	0.0	37.5	0.0	25.0	0.0	21.4	14.1
Unknown															
Teachers	2	3	0	3	2	11	4	1	1	2	6	4	5	6	50
%	16.7	30.0	0.0	25.0	22.2	40.7	40.0	33.3	33.3	25.0	75.0	50.0	71.4	42.9	37.0
Total Teachers	12	10	4	12	9	27	10	3	3	8	8	8	7	14	135

Table 64

Degree Goals of 1984-85 State Employed Distributive Education Teachers Distributed in Relation to Highest Degree Already Completed

Highest Degree Presently Held	Degree/Certificate Goal							No Response/	
	64-Hr	Bachelor's	5th Yr	Master's	Master's+30	Doctorate	Other	Unknown	Total
None	2	0	0	1	0	0	0	1	4
Bachelor's	0	0	0	1	4	1	0	0	6
Master's	0	0	0	1	4	0	0	1	6
Master's + 30	0	0	0	0	0	2	0	0	2
Unknown	0	0	0	0	0	0	0	10	10
Total	2	0	0	3	8	3	0	2	28

assumption, over three-fourths of the Kentucky distributive education teachers held the equivalent of a master's degree or higher in 1984-85.

Data also indicated the institution from which teachers received their most recently completed degree or certificate. As shown in Table 65, 71% of the reporting teachers received their highest or most recent degree from a Kentucky state university.

Data shown in that same table also reflected the relationship between the regions where teachers were employed and where they tended to go to school for their highest or most recent degree. In general, there appears to be the expected clustering of degrees earned from institutions geographically near where one works and lives.

Present Enrollment in Higher Education

State-employed teachers were asked if they were presently enrolled in some university program, and if so where it was and how many semester hours remained to be completed. Of the eighteen reporting state-employed distributive education teachers, three reported being enrolled in a 64-hour program; one each was enrolled in a fifth year program, a master's , and a doctorate; and two were in a master's-plus-30-hours program. Ten reporting teachers did not respond and might be assumed to not be enrolled in any program. Ten more were in the group for which no data was available.

Four state employed teachers claimed enrollment at Western Kentucky University with an average of 16.8 hours to complete, and 3 claimed the University of Kentucky with an average of 16.3 hours to complete. One each claimed Morehead State University and Murray State University.

Degree Goals

State-employed teachers were asked about their educational goals. Responses regarding degree goals in relation to the highest degree presently held, or "how far one has yet to go," are reflected in Table 64.

Fifteen of the eighteen teachers indicated having as a goal some degree higher than that degree which they presently held. Eight of these fifteen indicated a desire to earn a master's degree plus 30 hours, or the equivalent of a Rank I.

As with some previous data, goals of reimbursed teachers were not available due to different sources of information. Therefore, this information is available on only a small proportion of distributive education teachers.

Table 65

Institutions Where Kentucky 1984-85 Distributive Education Teachers Received Their Highest or Most Recently Completed Degree or Certificate

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	0	1	0	0	0	1	0	0	0	1	0	2	5	3.7
Kentucky State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Morehead State University	0	0	0	0	0	0	0	0	1	2	1	0	0	0	4	3.0
Murray State University	9	7	0	0	1	0	0	0	0	0	0	0	0	0	17	12.6
Northern Kentucky University	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	4.4
University of Kentucky	0	0	1	0	2	4	0	0	0	1	0	1	1	2	12	8.9
University of Louisville	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.7
Western Kentucky University	0	0	3	6	3	6	0	0	0	0	0	0	1	0	19	14.1
Other Schools In-State	0	0	0	0	0	2	0	1	0	1	1	2	0	1	8	5.9
Other Schools Out-of-State	1	0	0	0	1	3	0	0	1	1	0	0	1	1	9	6.7
No Response/Unknown	2	3	0	5	2	11	4	1	1	3	6	4	5	7	54	40.0
Total	12	10	4	12	9	27	10	3	3	8	8	8	7	14	135	100.0

Marketing and Distributive Education Teacher Education

Historical Perspective

Certification for teaching marketing and distributive education was first begun as an inservice program in 1966 at the University of Kentucky under Maurice Baker as part of industrial education. Certification required work experience and a 24-hour block of coursework, with no degree requirement. If an individual had both a degree and work experience, less inservice credit was required. In 1967 Clayton Riley joined the University of Kentucky staff. He was followed by Dr. Juanita Wallace Bice and Dr. Mike Minor through the 1970's, and by Dr. Carolyn Litchfield, who left the University of Kentucky in 1982. No distributive education faculty member has been regularly assigned since 1981; however, bachelor's degree certification and the nine-hour block remain as options at the University of Kentucky.

From 1968 to 1971 the certification program added a business education teacher endorsement program to its industrial education base. Business teachers could be certified after completing a nine-hour block of distributive education courses. In 1972 distributive education certification added a bachelor's degree requirement, and after 1976 the nine-hour business and office option was eliminated. Certification thus required a bachelor's degree in distributive education from 1976 to 1982, when the nine-hour block was reinstated for business and office teachers with appropriate work experience.

A proposal to change the Kentucky Office of Vocational Education's Marketing and Distributive Education Unit to Marketing Education was to be submitted to the State Board of Education. If accepted, the change would become effective in the fall of 1986.

Distributive teacher education was added at Murray State in 1970, with Dr. Alberta Chapman heading the program on a parttime basis. Dr. Tom Seymour took charge of the program in 1984 after Dr. Chapman's retirement.

Eastern Kentucky University also received program approval in 1970, but did not actually put the program into operation.

In the early 1970's, Dr. Clayton Riley moved from the University of Kentucky to Western Kentucky University and organized a distributive education program in the College of Business. This program flourished for a short time with additional faculty including Dr. Jerry Boles and Dr. Don Bradley. However, the program has been non-active since the fall of 1983 and is considered to be "temporarily suspended."

In 1972 a progam in distributive education was begun at Northern Kentucky University under the direction of Dr. Ken Carter. Dr. Carter was soon promoted, and Dr. Gary Scott was added to the distributive education faculty. This program has also terminated.

The University of Louisville was the last distributive education program to be added in the mid-70's. However, a regular faculty member was never assigned to the program. Dr. Randy Wells has worked with a few students, but on mostly a "hide-time" basis.

At present, Murray State University, the University of Kentucky, and the University of Louisville carry distributive teacher education on their books. The geographic distribution of these programs is illustrated in Figure 5.

During FY 1985 and 1986, the University of Kentucky was funded to provide the nine-hour distributive education block for business and office teachers. Funding was necessary since the classses were too small to be supported by regular FTE. In 1985, one teacher received distributive education certification through the bachelor's degree program and one through the nine-hour block. So far in FY 1986, five teachers have been recommended for the nine-hour block endorsement. Publicity of the program will occur in the fall of 1985, with additional classes being offered in the spring and summer of 1986.

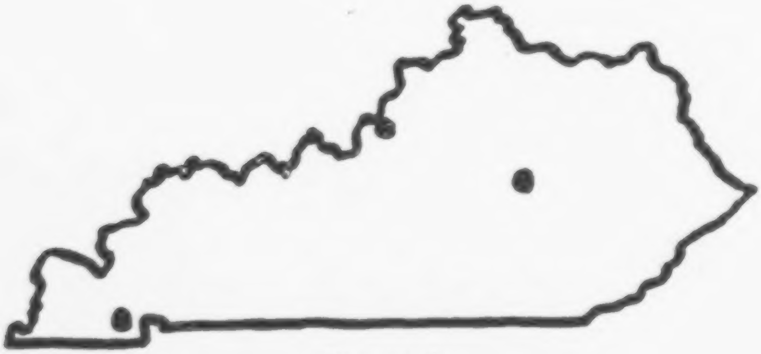

Figure 5

Location of Kentucky Distributive Education Teacher Education Programs

Enrollment Patterns

Teacher educators were asked to describe the typical or recommended enrollment patterns for students in distributive education.

Murray State University teacher educators indicated that their students enroll in Distributive Education as freshmen or transfer to the program from some other program at a later time.

At the University of Kentucky distributive education students enroll in the College of Education, Department of Vocational Education. Most generally enter the program as freshmen.

At the University of Louisville, students are enrolled in the College of Arts and Sciences for their first 51 hours after which they apply for admission to the School of Business. All the students are marketing majors. Required professional education courses are taken for teaching certification.

Faculty

Tables 66 and 67 show the numbers of teacher educators in Kentucky distributive education during the five years from 1979-80 through 1984-85. As can be seen, during those five years the teacher education faculty dropped from four instructors in four programs with 2.55 FTE to two instructors in two programs with only 0.25 FTE. Table 67 shows that both held doctorates.

Enrollment and Output

Enrollment and graduations are one way to express the student load of a program. While many faculty members in teacher education perform functions that cannot be measured in terms of enrollments and output, such as supervision of new teachers, in-service programs for schools and other agencies, committee work, and so on, student load expresses one phase of the issue.

As indicated in Table 68, only four students, all at Murray State University, were enrolled in undergraduate distributive education courses in 1984-85 in Kentucky. None were seniors, indicating no potential graduates or new teachers for 1984-85.

Over the last five years, there have been a number of distributive education graduates from the state universities. While Table 69 indicates 46 graduates (all of whom applied for certification) since 1979-80, it also shows a decline from 13 and 14 graduates in 1979-80 and 1980-81 to only 4 graduates in 1983-84.

Teacher educators reported some distributive education graduate students in various universities. A total of 20 at Murray State University, the University of Kentucky, and the University of Louisville had been enrolled in some graduate course during the year (Table 70.) And a total of 16 were reported as being enrolled in some post-baccalaureate program, whether or not they took courses during 1984-85 (Table 71.)

Table 66

Distributive Education Faculty and Full Time Equivalents (FTEs): 1979-1984

Institution	1979-1980		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University										
Kentucky State University										
Morehead State University										
Murray State University	1	1.0	1	1.0	1	1.0	1	1.0	1	1.0
Northern Ky. University										
University of Kentucky	1	1.0	1	1.0	1	1.0	0	0.0	0	0.0
University of Louisville	1	0.05	1	0.05	1	0.05	1	0.05	1	0.05
Western Kentucky University	1	0.05	1	0.05	0	0.0	0	0.0	0	0.0
TOTAL	4	2.55	4	2.55	3	2.05	2	1.05	2	1.05

Table 67

Distributive Education Faculty Degrees, FTEs and K-12 Experience; 1984-85

Institution	Highest Degree			Total	FTE	Number with K-12 experience
	BA/BS	MA/MS	Doct.	n		
Eastern Ky. University						
Kentucky State University						
Morehead State University						
Murray State University	0	0	1	1	0.2	0
Northern Ky. University						
University of Kentucky	0	0	0	0	0.0	0
University of Louisville	0	0	1	1	0.05	0
Western Ky. University	0	0	0	0	0.0	0
TOTAL	0	0	2	2	0.25	0

Table 68

Preservice Enrollments for 1984-85 in Distributive Education

Institution	Freshmen		Sophomores		Juniors		Seniors	
	n	%	n	%	n	%	n	%
Eastern Kentucky University								
Kentucky State University								
Morehead State University								
Murray State University	2	100.0	1	100.0	1	50.0	0	0.0
Northern Kentucky University								
University of Kentucky	0	0.0	0	0.0	1	50.0	1	100.0
University of Louisville	0	0.0	0	0.0	0	0.0	0	0.0
Western Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	2	10.0	1	100.0	2	100.0	0	100.0

Table 69

Kentucky Distributive Education Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University												
Kentucky State University												
Morehead State University												
Murray State University	0	0.0	2	14.3	0	0.0	1	16.7	0	0.0	3	6.5
Northern Kentucky University												
University of Kentucky	a		3	21.4	2	22.2	0	0.0	1	25.0	6	13.0
University of Louisville	1	7.7	1	7.1	0	0.0	2	33.3	1	25.0	5	10.9
Western Kentucky University	12	92.3	8	57.2	7	77.8	3	50.0	2	50.0	32	69.6
TOTAL	13	100.0	14	100.0	9	100.0	6	100.0	4	100.0	46	100.0

[a] Data not available

Table 70

Distributive Education Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Institution	Level										Total	
	5th Year		M.A./M.S.		Rank I		Specialist		Doctorate			
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University												
Kentucky State University												
Morehead State University												
Murray State University	1	100.0	6	66.6	5	50.0	0	0.0	0	0.0	12	60.0
Northern Kentucky University												
University of Kentucky	0	0.0	3	33.3	0	0.0	0	0.0	0	0.0	3	15.0
University of Louisville	0	0.0	0	0.0	5	50.0	0	0.0	0	0.0	5	25.0
Western Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1	100.0	9	100.0	10	100.0	0	0.0	0	0.0	20	100.0

Table 71

Distributive Education Students Considered to be Enrolled in a Post-Baccalaureate Program, 1984-85

Institution	Level 5th Year n	%	M.A./M.S. n	%	Rank I n	%	Total n	%
Eastern Kentucky University								
Kentucky State University								
Morehead State University								
Murray State University	0	0.0	1	7.2	1	50.0	2	12.5
Northern Kentucky University								
University of Kentucky	0	0.0	3	21.4	1	50.0	4	25.0
University of Louisville	0	0.0	10	71.4	0	0.0	10	62.5
Western Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0
Total	0	0.0	14	100.0	2	100.0	16	100.0

Murray State University, the University of Kentucky, and the University of Louisville reported a total of 14 master's degree completions and four Rank I completions over the past five years, with the Rank I completions all being during 1983-84 (Table 72.)

Follow-Up of Graduates

In order to see what the graduates were doing and, especially, how many were teaching, teacher educators were asked about present employment of graduates. Responses are presented in Table 73. Of the fourteen graduates whose whereabouts were known, nine were in a job requiring certification or, presumably, teaching.

Summary

In 1984-85, there were at least 135 distributive education teachers in Kentucky. They averaged 38.1 years old with 11.4 years of teaching experience. Age and experience data indicated that a few retirements might be expected. Despite relatively few teachers across the state, it appears that there will continue to be a need for a few new distributive education teachers to replace those lost through normal attrition. It is possible that more may be needed than are reflected in data presented here, due to new, unrecorded, or temporary programs.

With 36.5% of the group holding Rank I certificates, distributive education teachers were high among vocational teachers. At the same time, state-employed distributive education teachers indicated considerable desire for further degrees.

Training of distributive education teachers was allotted a very small proportion of faculty time in Kentucky. Two teacher educators in two universities reported spending a combined total of 0.25 FTE on distributive education in 1984-85, with the rest of their time assigned to other areas.

Presently very few students are enrolled in undergraduate distributive education programs. However, the universities reported 16 enrolled in some graduate program. Others may have been enrolled in a graduate program not in vocational education and, therefore, not counted here. It appears that despite the few new potential distributive education teachers there are still educational needs at the graduate level.

Table 72

Graduate Program Completions in Distributive Education

Institution	1979-1980		1980-1981		1981-1982		1982-1983		1983-1984		Sub Total		Grand Total	
	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	n	%
Eastern Ky. University														
Kentucky State University														
Morehead State University														
Murray State University	1	0	0	0	0	0	0	0	0	0	1	0	1	5.3
Northern Ky. University														
University of Kentucky	0	0	0	0	2	0	0	0	1	0	3	0	3	15.8
University of Louisville	2	0	2	0	3	0	3	0	1	4	11	4	15	78.9
Western Ky. University	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
TOTAL	3	0	2	0	5	0	3	0	2	4	15	4	19	100.0

Table 73

Present Employment of Distributive Education Graduates from 1979-80 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate school, armed services, unemployed		Don't Know		Total graduates applying for certificate	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Ky University												
Ky State University												
Morehead State U												
Murray State U	1	33.3	2	66.7	0	0.0	0	0.0	0	0.0	3	100.0
Northern Ky University												
University of Ky	4	66.7	0	0.0	0	0.0	2	33.3	0	0.0	6	100.0
University of Louisville	4	80.0	0	0.0	1	20.0	0	0.0	0	0.0	5	100.0
Western Ky University	0	0.0	0	0.0	0	0.0	0	0.0	32	100.0	32	100.0
TOTAL	9	19.6	2	4.3	1	2.2	2	4.3	32	69.6	46	100.0

Health and Personal Services Occupations Teachers

The typical health occupations teacher is a female who is 43 years old and has taught about ten years. She is most likely to be teaching practical nursing in a state-operated program. She probably holds either a Rank I or a Rank II teaching certificate as well as being licensed in her nursing profession. She most likely came to teaching after training and practicing in her initial profession. She then earned her professional education credentials while teaching.

Numbers of Teachers

The designation "Health and Personal Services Occupations Teachers" represents a varied group of Kentucky vocational teachers numbering, in 1984-85, about 228 persons. Data from PSD reports indicated that 26 health occupations teachers were teaching some area in reimbursed programs. Data from regional directors and the VTDF survey indicated at least 202 persons were teaching in some area classified as health occupations in state-operated programs. These totals, along with regional figures, are shown in Table 74.

The "Health and Personal Services Occupations" or, more briefly, "Health Occupations" designation covers a variety of program titles ranging, as Table 75 indicates, from practical nursing through other medical-related fields to barbering and cosmetology. More teachers (61) were in practical nursing than in any other field, with health services second (46 teachers.) Cosmetology also had a considerable number with 25 instructors across the state.

Data from regional directors indicated that the numbers of state employed health occupations teachers had remained fairly stable over the past five years, ranging from a low of 196 in 1980-81 to a high of 205 in 1982-83 and also in 1983-84.

Age and Experience

In 1984-85 the average health occupations teacher was 43.4 years old and had taught for 9.8 years. The mean age and teaching experience for each region are shown in Tables 76 and 77. This data does not reflect the years of professional experience accumulated before entering teaching.

Examination of Tables 76 and 77 may give some indication of potential retirements statewide and in individual regions. For instance, 13 teachers were over 60 years old, and 15 more were in the 56-60 bracket. At the same time, no teacher had 30 or more years of teaching, and only two had at least 25 years of teaching experience.

Table 74

Numbers of Health and Personal Services Occupation Teachers in Kentucky, 1984-85 by Type of Teacher and Vocational Region

Type of Teacher	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Reimbursed[a]	0	2	0	1	1	15	0	1	2	0	0	2	1	1	26
Employed[b]	25	21	9	16	4	21	19	7	7	11	12	18	8	24	202
Total	25	23	9	17	5	36	19	8	9	11	12	20	9	25	228

[a] From PSD data

[b] From Regional Directors and VTDF surveys

Table 75 Continued

Program Titles and O.E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Health Services 07.9901	3	5	3	4	3	2	4	3	0	2	2	4	5	6	46
Related 07.9908	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Unknown	1	4	0	2	1	0	1	1	0	4	2	3	1	3	23
Total	25	21	9	16	4	21	19	7	7	11	12	18	8	24	202

Table 76

Ages of 1984-85 Health and Personal Services Occupations Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.4
26-30	5	1	0	1	0	0	2	1	1	2	2	2	2	1	20	8.8
31-35	3	2	0	2	1	6	4	2	2	0	0	1	2	3	28	12.3
36-40	0	5	2	1	2	5	1	2	2	1	4	2	1	3	31	13.6
41-45	6	3	2	2	0	10	4	0	0	0	0	5	1	2	35	15.3
46-50	5	2	2	6	0	4	1	1	1	0	2	1	0	6	31	13.6
51-55	1	4	3	1	0	5	1	0	0	1	2	3	1	2	24	10.5
56-60	0	1	0	0	0	4	2	1	2	1	0	1	1	2	15	6.6
61-65	4	0	0	2	1	0	2	0	0	1	0	1	0	0	11	4.8
65+	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0.9
Unknown	1	5	0	2	1	1	2	1	1	4	2	3	1	6	30	13.2
Total	25	23	9	17	5	36	19	8	9	11	12	20	9	25	228	100.0
Mean Age	42.9	43.0	46.0	45.6	43.5	44.7	43.6	39.5	41.1	47.3	41.1	43.5	40.1	43.8	43.4	

Table 77

Years of Experience of 1984-85 Health and Personal Services Occupations Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	3	2	1	1	1	0	1	1	0	0	0	2	1	1	14	6.1
1-4	6	3	1	1	1	2	2	4	2	3	2	4	2	5	38	16.7
5-9	5	3	2	4	1	7	8	0	3	1	2	4	2	8	50	21.9
10-14	2	5	3	4	1	13	5	1	4	1	3	6	1	3	52	22.8
15-19	5	4	2	3	0	9	2	1	0	0	3	1	3	5	38	16.7
20-24	3	2	0	2	0	4	0	0	0	1	0	0	0	0	12	5.3
25-29	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0.9
30+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	1	4	0	2	1	0	1	1	0	4	2	3	0	3	22	9.6
Total	25	23	9	17	5	36	19	8	9	11	12	20	9	25	228	100.0
Mean Years of Experience	8.7	10.6	8.9	11.1	4.5	13.1	8.3	5.4	8.5	10.6	11.2	7.6	9.2	8.7	9.8	

It seems likely that some of this group could retire soon due to age, but if 30 years of teaching is the goal, there may be few retirements in the immediate future.

Teacher Turnover

Table 77 also indicates the number of teachers in their first year of teaching, or the "new hire rate." In 1984-85 there were 14 health occupations teachers in their first year of teaching, giving a "new hire rate" of 6.1%. Table 78 then presents new hire data over the last five years for reimbursed teachers (comparable data was not available for state-employed teachers.) In five years only one new teacher was hired into this group, indicating that the reimbursed health occupations teachers appear to be a very stable group. Combining the figures, it would seem that, despite the low new hire rate for reimbursed teachers, the overall new hire rate and is somewhat higher for health occupations teachers than for some other vocational areas.

Rank

Besides the full-time personnel documented here, it should be noted that there were also a number of part-time people teaching short-term programs, according to state department program consultants. These programs are added or phased out as needed. State department personnel predicted that programs will increase as the need presents itself, especially in short-term programs such as geriatric assistant, and home health aides.

Because many health occupations teachers enter vocational teaching directly from their original profession and before completing teacher certification, they earn ranks on a system like that of industrial education teachers rather than like agriculture, home economics, or business education teachers and others who generally are qualified to teach before they take their first teaching job. As a result, the rank designations indicate a different system of educational attainment that takes into account previous professional training and work experience, as well as professional education courses. For example, a Rank III is given to health occupations teachers who qualify otherwise and who are enrolled in a 64-hour program. Completion of that 64-hour program plus two years of teaching (or 24-hour program before 1977) qualifies the teacher for Rank II. Rank I is earned by completion of a bachelor's degree plus four years of teaching experience.

Over the past five years the percentages of Rank I teachers in reimbursed programs have generally increased while the proportions of Rank II and Rank III teachers have generally declined (Table 79.) Data in this Table can be used to trace the professional advancement of the teachers along with program increases and decreases as represented by totals.

Table 78

New Hire Rates for Kentucky Reimbursed Health and Personal Services Occupations Teachers, for 1980-1985

Year	Total Reimbursed Teachers	0 Years Experience	
		n	% or "New Hire Rate"
1980-81	22	0	0.0
1981-82	21	1	4.8
1982-83	24	0	0.0
1983-84	25	0	0.0
1984-84	26	0	0.0

Table 79

Ranks of Kentucky Reimbursed Health and Personal Services Occupations Teachers, 1980-1985

Year	Rank I		Rank II		Rank III		Total n
	n	%	n	%	n	%	
1980-81	0	0.0	13	59.1	9	40.9	22
1981-82	5	23.8	9	42.9	7	33.3	21
1982-83	5	20.8	11	45.8	8	33.3	24
1983-84	10	40.0	11	44.0	4	16.0	25
1984-85	10	38.5	11	42.3	5	19.0	26

1984-85 rank data were available on 202 teachers, with another four teachers included in the data group but not responding to this item. Rank I was reported by 79 or 34.7% of the group. Another 36.0%, or 82 teachers, were classed Rank II. No information was available on twenty six teachers. Regional rank distributions for 1984-85 health occupations teachers are also shown in Table 80.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were asked to indicate the highest degree or certificate they had completed. Results are reported in Table 81 along with degree goals. The largest group (62 teachers or 30.7%) had completed a bachelor's degree. The next largest group (42 teachers or 20.8%) had completed 64-hour certification. Ten indicated they had completed no degree or certificate; these were presumably teachers who were working on 64-hour certificates or bachelor's degrees. No data was available on 14 teachers. Twenty-two said their highest or most recent degree was "Other." Notations or responses to other items indicated, in some cases, that "Other" referred to nursing schools or other similar professional programs.

State-employed teachers were also asked to name where they earned their highest or most recent degree. Responses were tabulated for each of the state universities, other schools in the state as a group, and all out of state schools as a group. The largest group (36 teachers) received their most recent degree/certification from Murray State University, while thirty-two teachers received theirs from Eastern Kentucky University. The rest, as Table 82 indicates, were divided among all the state universities except Kentucky State University. It should also be noted that twenty indicated other in-state schools, and seventeen indicated out-of-state schools. In some cases, additional information indicated that the in-state schools as well as the out-of-state schools were nursing schools or other professional programs.

Data shown in Table 82 also provides information regarding the regions served by each university. Most of the teachers (113 out of 138 with highest degrees from state universities) were currently employed in the same region or in a region bordering the region where their university was located. Because many of the highest/most recent degrees were education certificates or degrees earned while also teaching full time, it is not surprising to find that the large portion of graduates from any university tended to be presently employed in the same region where the university is located or in one of the bordering regions.

Enrollment in Higher Education

State-employed teachers were asked to indicate if they were presently enrolled in specified university programs and, if so,

Table 80

Ranks of 1984-85 Kentucky Health and Personal Services Teachers For All Regions

Rank Level	Vocational Regions														Statewide Totals
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Rank I															
Teachers	6	10	5	2	1	16	5	2	4	2	5	5	4	12	79
%	24.0	43.5	55.6	11.8	20.0	44.4	26.3	25.0	44.4	18.2	41.7	25.0	44.5	48.0	34.7
Rank II															
Teachers	9	5	3	9	1	15	9	3	2	4	3	7	5	7	82
%	36.0	21.7	33.3	52.9	20.0	41.7	47.4	37.5	22.2	36.4	25.0	35.0	55.6	38.0	36.0
Rank III															
Teachers	7	4	1	3	3	5	3	2	3	1	2	5	0	2	41
%	28.0	17.4	11.1	17.7	60.0	13.9	15.8	25.0	33.3	9.1	16.7	25.0	0.0	8.0	18.0
Unknown															
Teachers	3	4	0	3	0	0	2	1	0	4	2	3	0	4	26
%	12.0	17.4	0.0	17.7	0.0	0.0	10.5	12.5	0.0	36.4	16.7	15.0	0.0	16.0	11.4
Total Teachers	25	23	9	17	5	36	19	8	9	11	12	20	9	25	228

Table 81

Degree Goals of 1984-85 State-Employed Health and Personal Services Occupations Teachers, Distributed in Relation to Highest Degree Presently Held

Highest Degree/ Certificate Presently Held	Degree Goal								Total	
	64 Hr.	Bachelor's	5th Yr.	Master's	Master's +30	Doctor-ate	Other	No Resp/ Unknown	n	%
None	1	6	0	1	0	1	0	1	10	4.9
24 Hr.	0	5	0	0	0	0	1	8	14	6.9
64 Hr.	3	23	0	9	0	0	0	7	42	20.8
Bachelor's	2	11	0	21	6	1	3	18	62	30.7
5th Year	0	1	1	1	1	0	0	0	4	2.0
Master's	0	0	0	2	2	4	1	7	16	7.9
Master's +30	0	0	0	0	1	1	0	0	2	1.0
Other	1	11	0	3	1	0	1	5	22	10.9
No Response/ Unknown	0	5	0	0	1	0	0	24	30	14.9
Total	7	62	1	37	12	7	6	70	202	100.0

Table 82

Institutions Where Kentucky 1984-85 Health and Personal Service Teachers Received Their Highest or Most Recently Completed Degree or Certificate

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	0	0	1	0	4	2	0	2	6	4	5	8	32	14.0
Kentucky State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Morehead State University	0	0	0	0	0	0	0	2	5	1	0	0	0	0	8	3.5
Murray State University	15	9	6	0	0	6	0	0	0	0	0	0	0	0	36	15.8
Northern Ky University	0	0	0	0	0	0	9	0	0	0	0	0	0	0	9	4.0
University of Kentucky	1	0	0	0	0	1	0	0	1	1	2	2	0	7	15	6.6
University of Louisville	0	0	0	0	0	15	0	0	0	0	0	0	0	1	16	7.0
Western Ky University	0	2	0	7	1	2	0	0	0	0	0	0	4	0	16	7.0
Other Schools In-State	1	1	2	0	0	5	0	2	0	1	0	6	0	2	20	8.8
Other Schools Out-of-State	1	5	1	2	0	1	2	0	1	0	0	3	0	1	17	7.5
No Response/ No Degree	6	2	0	6	2	6	3	1	2	2	2	2	0	3	37	16.2
Unknown	1	4	0	2	1	0	1	1	0	4	2	3	0	3	22	9.6
Total	25	23	9	17	5	36	19	8	9	11	12	20	9	25	228	100.0

where. Of the 180 teachers reporting, 101 did not respond, presumably indicating that they were not enrolled in any program. Thirteen claimed enrollment in a 64-hour program, 43 claimed enrollment in a bachelor's degree program, 18 in fifth year or master's degree programs, and one in a master's-plus-30-hours program. Four indicated "Other."

The enrollees were spread among all the state universities with the exception of Kentucky State University. Murray State University recorded 18 enrollees or 10.0% of the reporting teachers; Eastern Kentucky University had 14 enrollees or 7.8%. The University of Louisville and Western Kentucky University each had 11 or 6.1%; Morehead State University had 8 enrollees; Northern Kentucky University had 6 enrollees; the University of Kentucky had 5 enrollees. Five teachers were enrolled in other in-state schools, and three were enrolled out of the state.

Degree Goals

State-employed teachers were asked about their degree or certificate goals. Responses were tabulated in relation to the highest degree the teacher already held in order to get some measure of "how far one has yet to go." Of 104 complete, classifiable responses, 83 or 79.8% aspired to a higher level of education or certification (Table 81.) A fairly high number indicated their goal was the level just above their present status--in many cases, the degree they were working on.

Institution Awarding First Degree

In examining sources of the teacher supply, one can look at where teachers graduate. In the case of health occupations teachers, many worked in their health field for a time before entering teaching. As a result, responses regarding where these teachers earned their first degrees were mixed and included both education certification or degrees as well as professional programs such as nursing schools.

Thirty-one health occupations teachers received their first degree from Murray State University. Twenty-six listed Eastern Kentucky University, and 20 listed the University of Kentucky. Eleven indicated Western Kentucky University, ten listed the University of Louisville, and eight each listed Morehead State University and Northern Kentucky University. Twenty-one listed other in-state schools, and 17 indicated out-of-state schools. A number of the "Other" schools were professional programs, such as schools of nursing.

Health and Personal Services Occupations Teacher Education

Historical Perspective

In Kentucky, as in other states, there was a critical shortage of professional nurses during and following World War II. The Kentucky State Association of Registered Nurses initiated state legislation in 1946 to provide for the education, supervision, and regulation of practical nurses. The proposed legislation provided for licensure that would control the activities of the practical nurses after their education was completed.

A federal act passed in 1956 required that a state plan for the operation of educational programs for practical nurses be submitted to the U. S. Office of Education for approval. Because health occupations training was considered a phase of industrial education, the Director of Trade and Industrial Education, Fred Martin, and a T & I teacher educator from the University of Kentucky, L. C. McDowell, wrote the first State Plan for Practical Nurse Education in Kentucky. The plan was approved by the U.S. Office of Education in 1957.

By the time the State Plan for Practical Nurse Education in Kentucky was approved and ready to be implemented, there were seven practical nurse programs in operation in Kentucky. Four of the already existing programs were brought under the auspices of vocational education, and an additional program was approved, making a total of five vocational education programs in 1957.

The first practical nurse program in Kentucky, the Oakdale School, was established in 1949 in Louisville. It was financed by local and state funds and received no vocational education funds until 1957. The Oakdale School has operated continuously since 1949, although its name has been changed twice and its administrative agent three times. It has been known as the Jefferson County School for Practical Nurses since 1957.

The practical nurse program at Mayo School, in Paintsville, was the first vocational practical nurse program in Kentucky to be financed by vocational education. Since its opening, a number of practical nursing schools have begun in the state. Other kinds of health occupation programs that have operated in the state include Aide/Orderly, Surgical Technician Program, Ward Clerk, Home Health Aides, and Dental Assistant.

Since 1957, in the adult education category, Health Occupations Education has been very active, offering classes for practical nurses who have been licensed by waiver. These classes are designed to provide theory and skills in the occupation that are not ordinarily learned "on the job."

Since 1960, classes have been offered for employed aides-orderlies to up-grade knowledge and skills in the occupation.

An agreement was made about 1967 with the University of Kentucky Community College System and Eastern Kentucky University to partially finance their associate degree nursing programs with vocational funds.

Soon after the 1963 Act there was an interest in reorganization of the structure of the Bureau of Vocational Education in Kentucky. However, it was not until late 1967 that a request for regulation appeal was presented to the Kentucky State Board of Education. This request resulted in changing "Practical Nurse Training" Occupations Education to "Health Occupations Education" and created a new division in the Bureau of Vocational Education.

In 1968, a new program, "Health Occupations," was first offered for high school students. And in the fall of 1968 the first class of high school students was enrolled at Tilghman Trade School, in Owensboro, for training of practical nurses on an experimental basis.

With the inclusion of cosmetology and barbering about 1972 or 1973, the Health Occupations Unit was changed to the Health and Personal Services Occupations Unit.

Health occupations teacher education programs began at Western Kentucky in 1973-74 with Dr. Norma Jean Schira as the teacher educator. About the same time, a program also began at the University of Louisville with Dr. Wilma Gillespie as the teacher educator in the early years. Presently Pat Leitsch serves as teacher educator at the University of Louisville.

Presently the University of Louisville and Western Kentucky University officially offer programs for health occupations teachers, although Western Kentucky University considers their program to be not operational. (See Figure 6.) The remainder of the health occupations teachers enroll in industrial education level III programs at the other universities. They take the same types of professional education courses taken by the industrial education level III inservice students. Like the industrial education level III teachers, these health and personal service occupations teachers also begin teaching before completing certification requirements.

Figure 6

Location of Kentucky Health and Personal Services Teacher Education Program

Enrollment Patterns

When teacher educators were asked to describe a typical enrollment pattern for their students, they described a pattern considerably different from that for a four-year preservice student, but quite similar to that of an industrial education level III teacher. Health and personal services occupations teachers come to teaching having already mastered a profession and having earned professional licensure. In the case of nurses and some of the other medical areas, they may have accumulated college credits or even a college degree in their chosen field. Therefore, when they enter one of the state universities, they are seeking to earn teaching credentials in particular, as well as other academic degrees. Specific comments on the patterns followed were provided by the teacher educators and are listed here.

Eastern Kentucky University. Students come to get education certificate after completing diploma.

Morehead State University. Vocational Health Occupations Teachers begin teaching as a level 3, 1 year certificate. They complete a 64 hour planned program consisting of 20 hours Professional, 20 hours General Education, and 24 hours Technical Specialty, and two years teaching experience to become level 2, and receive a 5 year certificate.

Northern Kentucky. Students enroll in one of the following: B.S. in Industrial Education or an A.A.S. in Industrial Education.

University of Kentucky. Health occupation students (registered nurses) typically complete the 64 semester hour planned program for the five (5) year certificate. Students may then apply those semester hours toward the B.S. degree in Vocational Industrial Education.

University of Louisville. Completion of specialty that leads to licensure; completion of EDVT 510, 512, and 516 then take general studies and remaining EDVT courses jointly.

Western Kentucky University. Operationally — no health occupations program (technically — yes.) Enrollees can go the Industrial Education route.

Faculty

In 1984-85 there were no full time health occupations education faculty in Kentucky. There were, however, nine faculty members, seven with doctorates, who spent some time working with health occupations education (Table 83.) If one adds up all the percentages of time spent by each of these people on health occupations programs and teachers, it totals 1.52 FTEs. Most, but not all, of these individuals were industrial education faculty members who also advised health occupations teachers as well as teaching courses attended by health occupations teachers.

The trend in numbers of faculty involved in health occupations education declined only from 15 in 1979-80 to 14 in 1983-84 with a slightly greater drop in FTEs over that time period. Then in 1984-85 the total number of faculty dropped to nine with an FTE of 1.52 (Table 84.) A large part of the FTE drop in 1984-85 was probably due to more precise accounting for faculty time. The actual decline in faculty would be even greater if one included the teacher educator who had primary responsibility at Western Kentucky Unviersity early in that time period and who is now assigned to other areas. However, details of the tenure of that individual were not included in the data. Regardless, little faculty time is presently expended on health occupations education as an individual service area.

Enrollment and Output

As stated earlier, health occupations teachers generally follow the pattern of first learning their chosen profession, becoming licensed in it, perhaps working at it for awhile, then taking a position as a health occupations teacher, and then earning their teaching credentials. As a result, health occupations "students" are generally enrolled either in the 64-hour program or in a 64-hour program leading to a bachelor's degree. Table 85 reveals that in 1984-85 teacher educators reported 25 undergraduates enrolled in the 64-hour program area, 25 enrolled in the 64 hour/bachelor's degree program area, and three considered to be enrolled in "Other." Almost half of these (47.2%) were reported by Murray State University.

Table 83

Health and Personal Services Occupations Teacher Education Faculty Degrees, FTE, and K-12 Experience: 1984-85

Institution	Highest Degree BA/BS	MA/MS	Doct.	Total n	FTE	Number with K-12 experience
Eastern Ky. University	0	0	1	1	.25	0
Kentucky State University						
Morehead State University	0	1	2	3	.25	3
Murray State University	0	0	2	2	.17	2
Northern Ky. University	0	0	1	1	.25	1
University of Kentucky	0	0	1	1	.50	1
University of Louisville	0	1	0	1	.10	1
Western Ky. University*						
Total	0	2	7	9	1.52	8

*Health Occupations program considered inoperational.

Table 84

Health and Personal Services Occupations Teacher Education Faculty and Faculty Time Equivalents (FTEs): 1979-1984[a]

Institution	1979-80		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5
Kentucky State University										
Morehead State University	3	2.5	3	2.5	3	2.5	3	2.5	3	2.5
Murray State University	5	2.5	5	2.5	5	2.5	6	3.0	7	3.5
Northern Kentucky University	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5
University of Kentucky	4	4.0	4	4.0	4	4.0	2	2.0	1	1.0
University of Louisville	1	0.5	1	0.5	1	1.0	1	1.0	1	1.0
Western Kentucky University [b]										
Total	15	10.5	15	10.5	15	11.0	14	9.5	14	9.0

[a] Based on: full time - 1.0; part-time - 0.5

[b] Health operations program considered inoperational. Data not available.

Table 85

Undergraduate Enrollment for 1984-85 in Health and Personal Services Occupations Teacher Education

Institution	64 Hr.		64 Hr/BS		Other		Total	
	n	%	n	%	n	%	n	%
Eastern Kentucky University	7	28.0	0	0.0	0	0.0	7	13.2
Kentucky State University								
Morehead State University	0	0.0	0	0.0	3	100.0	3	5.7
Murray State University	18	72.0	7	28.0	0	0.0	25	47.2
Northern Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0
University of Kentucky	0	0.0	6	24.0	0	0.0	6	11.3
University of Louisville	0	0.0	12	48.0	0	0.0	12	22.6
Western Kentucky University								
Total	25	100.0	25	100.0	3	100.0	53	100.0

Over the five years of 1979-80 to 1983-84, a total of 53 health occupations undergraduate students graduated (Table 86.) The distribution of these graduates by year and by school is also shown in Table 86. It would appear that numbers of graduates were fairly steady, with an exceptional upswing in 1981-82.

A number of health occupations students were reported to be enrolled in graduate courses (Table 87.) Of the 20 reported, 19 were in master's degree courses and one was working on Rank I. Again, Murray State University reported the largest group with 15 enrollees or 75% of the total enrollees.

When asked about health occupations students who were enrolled in some graduate program whether or not they had taken some course during the year, 39 were reported, with Murray State University having the most (87.2%.) Three-fourths of the group was enrolled in master's degree programs, and the other one-fourth was enrolled in Rank I programs (Table 88.)

The numbers of graduate completions is shown in Table 89. Over the five year reporting span, 15 earned fifth year/master's degrees and three completed Rank I/Specialist programs. Fifteen out of the total of eighteen completed their programs at Murray State University.

As was cautioned with other program areas, it must be noted that these figures do not necessarily represent all the health occupations teachers who were in graduate school during 1984-85. Depending on the curriculum and administrative set up of the individual school, some may have been enrolled in general education programs of some type and would not have come under the jurisdiction or accounting of vocational education.

Follow-Up of Graduates

As in other program areas where the students earn their certification after beginning their teaching career, the large proportion of health occupations graduates from 1979-1980 to 1983-1984 were known to be in teaching (or "employed in a job requiring a certificate.") Out of the 68 who were reported in this phase of the study, 55 or 80.9% were in teaching, and 13 or 19.1% were employed in a "related job, no certificate" (Table 90,) which in the case of health occupations could indicate the individual went back into nursing or cosmetology or whatever was their original profession.

Potential Program Changes

Teacher educators were asked to comment on any potential changes in their programs. The only response came from the University of Louisville and cited the "addition of a non-teaching degree for

Table 86

Kentucky Health and Personal Services Occupations Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	5	62.5	3	32.5	4	23.5	0	0.0	1	10.0	13	20.0
Kentucky State University												
Morehead State University	a		a		a		a		a		a	
Murray State University	1	12.5	1	12.5	6	35.3	4	40.0	7	70.0	19	29.2
Northern Kentucky University	b		b		b		b		b		12	18.5
University of Kentucky	0	0.0	0	0.0	1	5.9	2	20.0	0	0.0	3	4.6
University of Louisville	2	25.0	4	50.0	6	35.3	4	40.0	2	20.0	18	27.7
Western Kentucky University	c		c		c		c		c		c	
Total	8[d]	100.0	8[d]	100.0	17[d]	100.0	10[d]	100.0	10[d]	100.0	65	100.0

[a] Data not available

[b] Breakdown not available

[c] Program considered not operational

[d] Does not include Morehead or NKU graduates. However, NKU graduates are included in the total.

Table 87

Health and Physical Services Occupations Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Institution	MA/MS		Rank I		Total	
	n	%	n	%	n	%
Eastern Kentucky University	0	0.0	0	0.0	0	0.0
Kentucky State University	0	0.0	0	0.0	0	0.0
Morehead State University	0	0.0	0	0.0	0	0.0
Murray State University	14	73.7	1	100.0	15	75.0
Northern Kentucky University	0	0.0	0	0.0	0	0.0
University of Kentucky	2	10.5	0	0.0	2	10.0
University of Louisville	3	15.8	0	0.0	3	15.0
Western Kentucky University	0	0.0	0	0.0	0	0.0
Total	19	100.0	1	100.0	20	100.0

Table 88

Health and Personal Services Occupations Students Considered to be Enrolled in a Post-Baccalaureate Program

Institution	MA/MS		Rank I		Total	
	n	%	n	%	n	%
Eastern Kentucky University	0	0.0	0	0.0	0	0.0
Kentucky State University						
Morehead State University	0	0.0	0	0.0	0	0.0
Murray State University	24	82.8	10	100.0	34	87.2
Northern Kentucky University	0	0.0	0	0.0	0	0.0
University of Kentucky	2	6.9	0	0.0	2	5.1
University of Louisville	3	10.3	0	0.0	3	7.7
Western Kentucky University	0	0.0	0	0.0	0	0.0
Total	29	100.0	10	100.0	39	100.0

Table 89

Graduate Program Completions in Health and Personal Services Occupations

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Sub-Total		Total	
	5th/M	RI/Sp	5th/M	RI/Sp	5th/M	RI/Sp	5th/M	RI/Sp	5th/M	RI/Sp	5th/M	RI/Sp	n	%
Eastern Kentucky University	1	0	0	0	0	0	1	0	0	0	2	0	2	11.1
Kentucky State University	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morehead State University [a]														
Murray State University	4	3	3	0	1	0	1	0	3	0	12	3	15	83.3
Northern Kentucky University [b]														
University of Kentucky	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
University of Louisville	0	0	1	0	0	0	0	0	0	0	1	0	1	5.6
Western Kentucky University [c]														
Total	5	3	4	0	1	0	2	0	3	0	15	3	18	100.0

[a] Data not available

[b] Enrolled in College of Education

[c] Program considered not operational

Table 90

Present Employment of Health and Personal Services Occupations Graduates from 1979-80 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate school, armed services, unemployed		Don't Know		Total graduates	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Ky University	13	100.0	0		0		0		0		13	100.0
Ky State University												
Morehead State U[a]												
Murray State U	19	100.0	0	0.0	0		0		0		19	100.0
Northern Ky University	12	100.0	0	0.0	0		0		0		12	100.0
University of Ky	5	80.3	1	19.7	0		0		0		6	100.0
University of Louisville	6	33.3	12	66.7	0		0		0		18	100.0
Western Ky University[b]												
Total	55	80.9	13	19.1	0		0		0		68	100.0

[a] Data not available

[b] Program considered not operational

health occupation personnel to direct training/continuing education programs. Currently approximately 60 students are enrolled in this program and 10 have graduated."

Summary

Health and personal services occupations teachers teach under at least 14 O.E.codes, with the largest groups being in paractical nursing, cosmetology, and health services. While a few teach in reimbursed programs, the majority are in state-operated programs. They tend to be slightly older than teachers in some of the other vocational areas, and usually have had several years of occupational experience before entering teaching.

The new hire rate for health occupations teachers combined with predictions from state department program consultants suggests that there may be some potential openings in the field.

Using ranks as an indication, health and personal service instructors appear to have been pursuing further education.

Teacher education specifically for health occupations teachers in Kentucky is at an all-time low. In 1984-85 nine people were involved in the programs across the state, but the time spent equalled 1.52 FTEs. Most of the instructors involved were industrial education level III faculty members, as health occupations students presently enroll under industrial education level III programs and complete programs in that area.

Numbers of graduates have remained fairly constant over the past five years. An especially high percentage of graduates as well as presently enrolled students were recorded by Murray State University.

Home Economics Education

Home Economics Teachers

In 1984-85 the typical home economics teacher in Kentucky was a female (only three males were teaching home economics in Kentucky) who probably taught in a reimbursed, secondary program. She was about 40 years old with about 15 years of teaching experience. She probably held Rank II certification with a master's degree earned at one of the state universities.

Numbers of Teachers

In 1984-85 vocational home economics teachers in reimbursed and state-operated programs numbered 554, as best as could be determined from teacher lists, PSD data, regional directors, and the VTDF survey. There were also some home economics teachers employed in supervisory positions or non-classifiable programs that were not recorded. Besides these, there were at least 99 teachers in non-vocational programs. The teachers in non-vocational programs often taught seventh or eighth grade classes or else taught non-vocational programs in a few high schools. Many of these teachers would be vocationally certified and would constitute part of the pool of potential vocational home economics teachers. The regional distribution of these teachers is shown in Table 91.

The VTDF survey provided information on specific program areas being taught by the state employed teachers. Table 92 records the number of state-employed teachers in each region teaching under specific O.E.-designated program titles. The largest group was in commercial foods, with consumer and family life skills a close second. It should be noted that the state-employed teachers in the vocational schools serve a different clientele than do the reimbursed teachers and, therefore, are not to be considered representative of reimbursed teachers in the matter of programs taught.

Age and Experience

In 1984-85 the average home economics teacher was 39.8 years old and had taught for 14.7 years. The mean ages for each region are shown in Table 93. The average experience is shown similarly in Table 94.

Examination of Tables 93 and 94 may give some indication of potential retirements statewide and in individual regions. For example, sixteen home economics teachers were aged 61 or older, and 25 more were in the 56-60 age group. Fifteen teachers had taught 30 years or more and would be considered eligible for retirement. Forty-nine more teachers had taught 25-29 years and might be expected

Table 91

Numbers of Home Economics Teachers in Kentucky, 1984-85, by
Type of Teacher and Vocational Region

Type of Teacher	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Vocational Program															
Reimbursed [a]	34	40	31	39	29	66	46	25	25	29	21	39	30	67	521
State Employed[b]	2	2	2	3	4	5	3	2	2	1	0	3	0	4	33
Sub Total	36	42	33	42	33	71	49	27	27	30	21	42	30	71	554
Non-Vocational Programs[a]	5	6	9	5	9	40	8	2	1	0	3	0	0	11	99
Total	41	48	42	47	42	111	57	29	28	30	24	42	30	82	653

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[a] Information from Office of Education teacher list and PSD data

[b] Information from Regional Directors and VTDF Survey

Table 92

Numbers of 1984-85 State-Employed Vocational Home Economics Teachers Under Each Program Title for Each Vocational Region

Program Titles and O.E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Comprehensive Home Ec 09.0101	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Consumer Education 09.0104	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Cons. & Family Life Skills 09.0199	1	1	0	0	2	1	0	2	0	1	0	1	0	2	11
Child Care Services 09.0201	0	0	0	0	1	1	0	0	1	0	0	0	0	0	3
Commercial Foods 09.0203	1	1	1	2	1	2	1	0	1	0	0	2	0	1	13
Unknown	0	0	1	1	0	0	2	0	0	0	0	0	0	0	4
Total	2	2	2	3	4	5	3	2	2	1	0	3	0	4	33

Table 93

Ages of 1984-85 Vocational Home Economics Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	1	1	0	1	1	3	0	1	0	0	0	1	1	10	1.8
26-30	1	6	2	1	2	5	4	1	4	3	3	1	0	5	38	6.9
31-35	7	9	6	4	3	9	9	9	6	7	3	9	5	14	100	18.1
36-40	7	8	8	8	9	16	5	5	4	5	8	9	9	12	113	20.4
41-45	4	6	5	10	8	14	12	5	4	6	2	5	4	10	95	17.2
46-50	7	3	4	7	2	8	7	3	5	3	2	10	4	12	77	13.9
51-55	5	2	2	3	3	7	3	2	1	3	0	3	4	8	46	8.3
56-60	1	3	1	2	1	4	0	0	2	1	2	3	0	5	25	4.5
61-65	1	0	0	3	0	2	2	0	0	1	1	1	0	2	13	2.35
65+	0	0	1	0	0	0	0	1	0	0	0	1	0	0	3	0.5
Unknown	3	4	3	4	4	5	4	1	0	1	0	0	3	2	34	6.1
Total	36	42	33	42	33	71	49	27	27	30	21	42	30	71	554	100.0
Mean Age	42.0	37.9	39.8	44.	40.5	41.3	39.9	40.3	38.4	40.2	40.	43.2	40.	41.6	39.8	

Table 94

Years of Experience of 1984-85 Vocational Home Economics Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	0	0	1	0	1	1	2	0	1	0	0	0	0	1	7	1.3
1-4	1	5	2	0	3	2	4	0	3	4	3	1	2	7	37	6.7
5-9	5	10	4	5	5	14	11	6	5	7	3	6	5	13	99	17.9
10-14	12	9	10	7	10	17	6	10	8	5	6	8	7	14	129	23.3
15-19	7	10	8	11	7	21	10	4	6	5	5	7	6	13	120	21.6
20-24	5	2	4	7	3	7	8	5	1	3	3	10	4	16	78	14.1
25-29	3	2	3	8	1	4	4	2	3	4	0	7	3	5	49	8.8
30-34	2	0	0	1	1	1	0	0	0	1	0	1	0	2	9	1.6
35-39	0	0	0	1	0	1	0	0	0	1	1	1	0	0	5	0.9
40+	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.2
Unknown	1	4	1	2	2	3	4	0	0	0	0	0	3	0	20	3.6
Total	36	42	33	42	33	71	49	27	27	30	21	42	30	71	554	100.0
Mean Years of Experience	15.7	12.0	14.0	17.9	12.8	10.0	12.9	13.6	12.4	14.4	13.0	17.7	14.0	14.6	14.7	

to be considering retirement in a few years.

Teacher Turnover

Table 94 reports the 1984-85 new hire rate (the percentage of teachers who were in their first year of teaching) for all reporting Kentucky home economics teachers to be 1.3%. Table 95 then presents new hire data over the past five years for reimbursed teachers. It would appear that the new hire rate has been rather low over the past five years.

Rank

Data in Table 96 indicate that over the past five years the percentages of Rank I and Rank II reimbursed home economics teachers have steadily increased, while the percentage of Rank III teachers has decreased. Examination of Table 97 which presents rank information on all home economics teachers for 1984-85 shows that 22.6% held Rank I certification and 52.5% held Rank II certification. Three-fourths of the teachers, or 75.1%, held either Rank I or Rank II certification.

Regional rank distributions for all 1984-85 home economics teachers are also shown in Table 97. Individual universities may want to plan educational efforts in relation to regional needs as indicated.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were also asked to indicate the highest degree or certificate they had completed. Results reported in Table 98 (along with degree goals) indicate that almost all of the state-employed home economics teachers held a bachelor's degree or higher, and that two-thirds held some type of advanced degree. The single individual whose highest degree was a 64-hour certificate probably taught in one of the commercially oriented programs.

While information about the highest degree was not directly available from reimbursed teachers, the ranking system for these teachers is such that holding a Rank I certificate indicates completion of a master's degree plus 30 hours, and a Rank II equals a master's degree or planned 5th year program. Therefore, rank information in Table 96 and Table 97 can be assumed to also reflect the highest degree held by home economics teachers across the state. Given that assumption, three-fourths of the Kentucky vocational home economics teachers held the equivalent of a master's degree or higher.

Both the PSD form and the VTDF survey provided information about the institution from which teachers received their highest or most recent degree or certificate. As seen in Table 99, 467 teachers or 84.3% earned their highest or most recent degree from one of the state universities. Western Kentucky University was the most

Table 95

New Hire Rates for Kentucky Reimbursed Vocational Home Economics Teachers, 1980-85

Year	Total Reimbursed Teachers	0 Years Experience	
		n	% or "New Hire Rate"
1980-81	555	12	2.2
1981-82	543	8	1.5
1982-83	513	8	1.6
1983-84	521	9	1.7
1984-84	505	5	1.0

Table 96

Ranks and Percentages for Kentucky Reimbursed Home Economics Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total
	n	%	n	%	n	%	
1980-81	65	11.7	284	51.2	206	37.1	555
1981-82	90	16.6	285	52.5	168	30.9	543
1982-83	104	20.3	267	52.1	142	27.7	513
1983-84	117	22.5	276	53.0	128	24.6	521
1984-85	120	23.8	276	54.7	109	21.6	505

Table 97

Ranks of Kentucky Home Economics Teachers
for All Regions 1984-85

Rank	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Statewide Totals
I															
Teachers	14	8	7	15	3	12	2	10	4	4	5	19	9	13	125
%	38.9	19.1	21.2	35.7	9.1	16.9	4.1	37.0	14.8	13.3	23.8	45.2	30.0	18.3	22.6
II															
Teachers	18	20	19	16	21	37	29	14	20	15	11	12	14	45	291
%	50.0	47.6	57.6	38.1	63.6	52.1	59.2	51.9	74.1	50.0	52.4	28.6	46.7	63.4	52.5
III															
Teachers	3	10	6	9	7	18	14	3	3	11	5	10	4	13	116
%	8.3	23.8	18.2	21.4	21.2	25.4	28.6	11.1	11.1	36.7	23.8	23.8	13.3	18.3	20.9
Unknown															
Teachers	1	4	1	2	2	4	4	0	0	0	0	1	3	0	22
%	2.8	9.5	3.0	4.8	6.1	5.6	8.2	0.0	0.0	0.0	0.0	2.4	10.0	0.0	4.0
Total Teachers	36	42	33	42	33	71	49	27	27	30	21	42	30	71	554

Table 98

Degree Goals of 1984-85 State-Employed Vocational Home Economics Teacher, Distributed in Relation to Highest Degree Presently Held

Highest Degree Presently Held	Degree Certificate Goal: Bachelor	5th Yr	Masters	Masters + 30	Doctorate	Other	No Response	Total: n	%
64 Hr.	1	0	0	0	0	0	0	1	3.0
Bachelor's	0	0	4	3	0	0	0	7	21.2
5th Yr.	0	1	1	0	0	0	0	2	6.1
Masters	0	0	1	5	5	0	3	14	42.4
Masters + 30	0	0	0	0	0	1	4	5	15.2
Unknown	0	0	0	0	0	0	4	4	12.1
Total	1	1	6	8	5	1	11	33	100.0

Table 99

Institutions Where 1984-85 Kentucky Home Economics Teachers Received Their Highest or Most Recently Completed Degree or Certificate

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	1	0	0	2	8	10	3	3	3	8	20	9	27	94	17.0
Kentucky State University	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3	0.5
Morehead State University	0	0	1	0	1	0	2	20	19	18	10	1	1	6	79	14.2
Murray State University	34	22	7	0	2	8	0	0	0	0	0	0	0	0	73	13.2
Northern Ky University	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	1.1
University of Kentucky	0	2	5	3	3	11	11	3	2	6	1	4	3	29	83	15.0
University of Louisville	0	0	0	0	2	11	1	0	0	0	0	0	0	0	14	2.5
Western Ky University	0	10	17	36	19	18	4	0	0	0	1	1	7	2	115	20.7
Other Schools In-State	1	0	0	0	0	5	4	1	3	3	1	14	7	4	43	7.8
Other Schools Out-of-State	0	3	2	0	1	4	7	0	0	0	0	2	0	3	22	4.0
Unknown	1	4	1	3	2	4	4	0	0	0	0	0	3	0	22	4.0
Total	36	42	33	42	33	71	49	27	27	30	21	42	30	71	554	100.0

frequently cited, with 115 teachers earning the degree at that institution. Union College and Berea College were the independent schools most frequently cited.

Table 99 also provided information regarding the regions served by each university. Close examination of the data reveals that out of a total of 467 teachers who earned their highest degree from state universities, 402 teachers (86%) were employed in either the home region of that university or in one of the bordering regions. Because many of the highest/most recent degrees were graduate degrees earned while also teaching full time, it is to be expected that the large portion of graduates from any university were also likely to work within easy commuting distance. At the same time, it can be noted in Table 99 that some of the universities served many regions.

Present Enrollment of in Higher Education

Analysis of VTDF survey data provided considerable further information on state-employed teachers. Since in home economics the state-employed group is small in proportion to the total group of home economics teachers, appropriate data will be summarized here but not detailed in tables.

State-employed teachers were asked to indicate any present enrollment in some university program, and if so where it was. Of the 33 reporting teachers, eleven or 33.3% indicated that they were enrolled in some type of program. Five were enrolled in a master's-plus-30 program, and four were enrolled in master's or fifth year programs. One was in a doctorate program, and one was in "Other."

The universities with the highest numbers of state-employed enrollees were Murray State University with four enrollees, and Morehead State University and the University of Kentucky with three enrollees each. One teacher was enrolled at Eastern Kentucky University.

Degree Goals

State-employed home economics teachers were asked about their degree goals. Responses regarding degree goals in relation to the highest degree presently held, or "how far one has yet to go," are reflected in Table 98.

Of the teachers responding, it would appear that many planned further education. Of 22 teachers responding with some goal, 18 indicated a degree goal higher than the level they had already attained. Eight teachers cited a master's-plus-30 as their goal. Six teachers cited a master's degree; only one had attained it. Five cited a goal of a doctorate. If these teachers are in any way representative of all home economics teachers, it would appear that as a group they have plans for a considerable amount of further education.

Home Economics Teacher Education

Historical Perspective

A large proportion of the home economics teachers in the state have been trained in the state universities. In fact, it was with the passage of the Smith Hughes Act in 1917 that Kentucky, along with other states, first began to establish vocational education programs to train teachers in agriculture and home economics.

The first home economics teacher education program in Kentucky was established at the University of Kentucky prior to 1921. One of the earliest teacher educators was Dr. Spickard. Dr. Ethel Parker had the longest tenure as head of Home Economics Education. Among the other teacher educators were Dr. Anna Gorman, Dr. Ruth Sneed, Mrs. Evangeline Kelsey, Mrs. Inez Hill, Dr. Marjorie Stewart, Dr. Betty Powers, and Dr. Ann Willett Cline. Dr. Sandra Miller is currently serving as head.

According to the 1925-27 biennial report of the Kentucky Department of Education, the most significant development in the program of teacher training at the University of Kentucky was in the growth of Home Economics Education. Cooperative arrangements made with Georgetown and Versailles High Schools proved satisfactory to the University in supervising teachers in training.

During 1921-23, home economics teacher education programs were added at Bowling Green Teachers College and Berea College. Teacher educators at Bowling Green, which later became Western Kentucky University, included Miss Marie Adams, Mrs. Lucille Stiles; the current head is Dr. Violet Moore. During the mid-sixties, Western had the largest number of students training to be home economics teachers.

Miss Ruth Woods had a long tenure at Berea College. Others in recent years have been Mrs. Marjorie Hylton and Dr. Keila Carpenter Thomas.

By June 30, 1933, two additional institutions, Eastern Teachers College and Murray Teachers College, were training home economics teachers. Ruby Simpson served a number of years as department head and teacher educator at Murray. At Eastern the persons serving as teacher educators included Evelyn Slater and Dr. Ann Chase.

The Biennial Report of Kentucky Department of Education ending June 30, 1935, states that in the seventeen years from 1918 to 1935 a total of 454 persons were trained in Kentucky colleges and universities to teach home economics in high schools.

Federal funds spent in Home Economics Teacher Education in 1935-36 amounted to $17,555.65 and in 1936-37, the amount decreased to $16,966.08.

Between 1933 and 1943, two more institutions, Morehead State University and Kentucky State University, were approved to train home economics teachers. Miss Patti Bolin was the teacher educator at Morehead for a number of years. At Kentucky State University, Miss Emilie High was head of the home economics department and teacher educator.

In 1941-42, a conference was held to discuss changes in pre-service training programs brought about by colleges changing to the quarter system and to discuss ways of enriching the student teaching program. Four of the six colleges approved to train vocational home economics teachers were having the student teachers spend the entire day in the training center instead of only one class period.

The seventh university to train vocational home economics teachers was the University of Louisville. Dr. Frances Goldsmith served both as department head and teacher educator. Teachers were trained until the department was phased out in the early 1980's.

The newest college, Georgetown College, was approved to train teachers within the last five years. Mrs. Elinor Hay, department head and teacher educator, worked closely with the staff in the Home Economics unit of the State Department of Education in seeing that the college met the requirements for training teachers.

Table 100 illustrates the chronology of these program additions and deletions in Kentucky home economics education. The geographic location of these programs is portrayed in Figure 7.

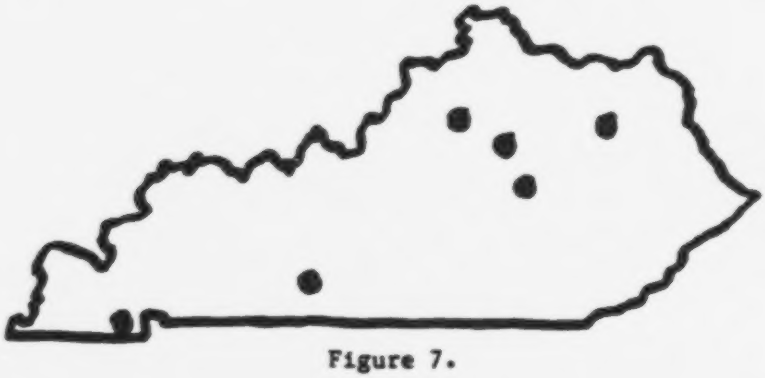

Figure 7.

Location of Home Economics Teacher Education Programs in Kentucky State Universities

Table 100

Development Chronology of Kentucky Home Economics Education Programs

Dates of Program Inception	Location
Before 1921	University of Kentucky
1921-23	Bowling Green Teachers College (Western Kentucky University) and Berea College
by June 1933	Eastern Teachers College (Eastern KY Univ.) Murray Teachers College (Murray State Univ.)
1933-34	Morehead State University
	Kentucky State University
Unknown	University of Louisville
Early 1980s	Phased out Univ. of Louisville
1980	Added Georgetown College

Besides the state university programs in home economics education, Berea College and Georgetown College also presently offer programs which lead to certification in vocational home economics.

Enrollment Patterns

Teacher educators were asked to describe a typical or recommended enrollment pattern for their students. While these vary within a program, and indeed, with individual students, some knowledge of these patterns is needed for interpretation of enrollment figures.

Eastern Kentucky University. Students enroll in home economics for four years; their advisor is in the Department of Home Economics. They take their education core in the College of Education.

Kentucky State University. Since 1983 students have been under an advisement process in which no student is required to declare a major field of study before completing 60 semester hours. Undergraduates may apply for admission to teacher education upon completing a minimum of 54 semester hours and meeting other criteria.

Morehead State University. Students enroll in vocational home economics education for four years. Students may also transfer into home economics education for the junior and senior years after completing an Associate Degree in Fashion Merchandising or Food Service Technology.

Murray State University. About half of the students start in teacher education, and about half transfer in at their junior year.

University of Kentucky. Students may become home economics education majors in their freshman year. However, most enter later.

Western Kentucky University. Students may declare a major as freshmen. However, they do not take Home Economics Education courses until their junior year.

Faculty

Teacher educators were asked to report the numbers of full-time and part-time faculty members in home economics education over the past five years. They also reported the highest degree held by the person as well as whether or not they had K-12 experience. Unless other information was provided, faculty members reported for 1979-1984 were recorded as 1 full time equivalent (FTE) if full time and 0.5 FTE if part time.

For most of the 1984-85 faculty a more precise percentage was provided by the teacher educators. If this was not available, then 1.0 FTE and 0.5 FTE were used for full time and part time.

As of 1984-85 there were 11 staff members involved in home economics education in Kentucky state universities (Table 101.) Six of the group held doctorates. A number of the staff members were involved in home economics education part time, making a total FTE of 5.40. Some of these part time people were actually full time faculty members at their universities who split their responsibilities between home economics education and some other area, such as content courses. Besides these, some of the part-time faculty were graduate assistants or teaching assistants who were directly involved in home economics education.

Data presented in Table 102 reflects the staffing of home economics education in Kentucky state universities over the previous five years. Comparison of Tables 100 and 101 reveals a decline in FTEs from previous years, especially 1983-84, to 1984-85. While part of this decline reflects the trend to cut-backs, part of it also reflects the more precise time percentages reported for 1984-85. Overall, it appears that Kentucky home economics education faculty numbers, though not FTEs, have held fairly stable.

Enrollment and Output

Undergraduate or preservice enrollment figures reported by each home economics education department in the state universities are reported in Table 103. Although totals for each university are shown, it must be noted that some institutions may not have listed freshmen or sophomores, depending on enrollment patterns and course sequences.

The independent colleges in Kentucky known to offer home economics education were sent an abbreviated survey form. Georgetown College responded, reporting five freshmen and three sophomores in answer to this question.

Examination of Table 103 shows a total of 41 seniors in 1984-85 who could be expected to enter the teacher pool. Besides these, 3 more were recorded as "Other." While not specified, "Other" often was used to represent graduated students who returned to earn teaching certification, and who, therefore, would be a part of the teacher pool in 1985.

Data in Table 104 indicates the graduates from each of the state universities from 1979-80 to 1983-84. The University of Kentucky reported the highest number of graduates over the period with 28.8 %.

Further examination of Table 104 would appear to indicate a downward trend in numbers of graduates in home economics education. However, as was indicated, 41 seniors were reported for 1984-85. If

Table 101

Home Economics Education Faculty Degrees, FTE, and K-12 Experience, 1984-85

Institution	Highest Degree			Total	FTE	Number With
	BA/BS	MA/MS	Doct.	n		K-12 Experience
Eastern Kentucky University	0	0	1	1	0.75	1
Kentucky State University	0	0	1	1	0.25	0
Morehead State University						
Murray State University	0	1	1	2	1.15	2
University of Kentucky	1	2	1	4	2.00	4
Western Kentucky University	0	1	2	3	1.25	3
Total	1	4	6	11	5.40	10

Table 102

Home Economics Education Faculty and Faculty Time Equivalents (FTEs): 1979-1984

Institution	1979-1980		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University	1	1.0	1	1.0	1	1.0	1	1.0	1	1.0
Kentucky State University	1	1.0	2	1.75	2	1.75	1	1.0	1	1.0
Morehead State University	2	1.5	2	1.5	2	1.5	2	1.5	2	1.5
Murray State University	1	1.0	1	1.0	1	0.5	2	1.0	2	1.5
Northern Ky. University										
University of Kentucky	3	3.0	4	3.0	3	2.5	2	1.0	4	1.75
University of Louisville										
Western Kentucky University	3	1.5	2	1.5	2	1.5	2	1.5	2	1.5
Total	11	9.0	12	9.75	11	8.75	10	7.0	12	8.25

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[a] Based on: Full time all year = 1; Part time all year = 0.5

Table 103

Preservice Enrollments for 1984-85 in Home Economics Education

Institution	Freshmen		Sophomores		Juniors		Seniors		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	6	25.0	5	17.9	6	19.4	8	19.5	0	0.0	25	19.7
Kentucky State University	0	0.0	0	0.0	1	3.1	1	2.4	1	33.3	3	2.4
Morehead State University	7	29.2	9	32.0	6	19.4	4	9.8	2	66.7	28	22.1
Murray State University	1	4.1	2	7.2	6	19.4	5	12.2	0	0.0	14	11.0
Northern Kentucky University												
University of Kentucky	3	12.5	6	21.4	7	22.6	13	31.7	0	0.0	29	22.8
University of Louisville												
Western Kentucky University	7	29.2	6	21.4	5	16.1	10	24.4	0	0.0	28	22.0
Total	24	100.0	28	100.0	31	100.0	41	100.0	3	100.0	127	100.0

Table 104

Kentucky Home Economics Education Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating		Total Applying for Certificate	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	6	14.0	8	17.0	10	2.8	7	21.9	4	15.4	35	19.0	35	19.0
Kentucky State University	0		2	4.2	0	0.0	0	0.0	0	0.0	2	1.1	2	1.1
Morehead State University	5	11.6	7	14.9	7	19.4	3	9.4	3	11.6	25	13.6	26	14.1
Murray State University	12	27.9	6	12.8	8	22.2	4	12.5	5	19.2	35	19.0	35	19.0
Northern Kentucky University														
University of Kentucky	14	32.5	18	38.3	5	13.9	9	28.1	7	26.9	53	28.8	53	28.8
University of Louisville														
Western Kentucky University	6	14.0	6	12.8	6	16.7	9	28.1	7	26.9	34	18.5	33	18.0
Total	43	100.0	47	100.0	36	100.0	32	100.0	26	100.0	184	100.0	184	100.0

that is an indication, it would appear that the number of graduates may be again rising.

Faculty members were also asked to indicate the number of graduate or postbaccalaureate students who were enrolled in some course in the teacher education program area for the school year 1984-85. The responses are shown in Table 105. Over half of the enrollees were in master's degree programs.

Georgetown College reported a total of 16 graduate enrollees taking courses taught by home economics education faculty. Thirteen of the 16 were master's students; one was a 5th year student; two were listed as "Other."

Another question asked how many graduate students were "in the pipeline" of a graduate program, regardless of whether or not they had taken a course during 1984-85. Responses shown in Table 106 indicate a total of 89 graduate students enrolled in some program, with the largest share being enrolled in a master's degree program. It must be noted that these figures would not include home economics teachers who are earning a master's degree in, for example, a general area such as secondary education

When home economics students returned to school to earn graduate degrees, they earned predominately 5th year or master's degrees. As indicated in Table 107, a total of 178 graduate degrees were earned over the years 1979-80 to 1983-84. (This data could reflect more than one degree earned by the same individual over that span of time.)

Georgetown College was approved for vocational home economics education in 1980. They reported one home economics teacher education graduate in 1980-81 and three in 1981-82.

Follow-Up of Graduates

In order to see what graduates of the programs were doing and, more particularly, how many were teaching, program heads were asked about current employment of graduates from the last five years. Responses presented in Table 108 indicate that 37.2 % were reported to be teaching. Another 30.1 % were known to be employed in some related job for which no certificate was necessary. This would include those who enter cooperative extension. A large portion were unknown, due partly, no doubt, to considerable turnover in teacher education faculty during the time period. If, however, one looks just at the numbers of those whose whereabouts were known, 50.4 % were thought to be teaching.

Table 105

Home Economics Education Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Institution	5th Year		M.A./M.S.		Rank I		Doctorate		Total	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	3	75.0	10	20.4	12	54.5	0	0.0	25	31.6
Kentucky State University										
Morehead State University	0	0.0	3	6.1	6	27.3	0	0.0	9	11.4
Murray State University	0	0.0	20	40.8	0	0.0	0	0.0	20	25.3
Northern Kentucky University										
University of Kentucky	1	25.0	7	14.3	0	0.0	4	100.0	12	15.2
University of Louisville										
Western Kentucky University	0	0.0	9	18.4	4	18.2	0	0.0	13	16.5
Total	4	100.0	49	100.0	22	100.0	4	100.0	79	100.0

Table 106

Home Economics Education Students Considered to be Enrolled in a Post Baccalaureate Program

Institution	5th Year		M.A./M/S.		Rank I		Specialist		Total	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	3	33.3	10	23.3	14	38.9	0	0.0	27	30.3
Kentucky State University	1	11.1	0	0.0	0	0.0	0	0.0	1	1.1
Morehead State University	0	0.0	4	9.3	2	5.5	0	0.0	6	6.8
Murray State University	0	0.0	10	23.3	0	0.0	0	0.0	10	11.2
Northern Kentucky University										
University of Kentucky	5	55.6	4	9.3	14	38.9	1	100.0	24	27.0
University of Louisville										
Western Kentucky University	0	0.0	15	34.8	6	16.7	0	0.0	21	23.6
Total	9	100.0	43	100.0	36	100.0	1	100.0	89	100.0

Table 107

Graduate Program Completions in Home Economics Education

	1979-80				1980-81				1981-82				1982-83				1983-84				Sub-Total				Total	
Institution	5th/M	R.I/Sp.	Doc.	Other	5th/M.	R.I/Sp.	Doc.	Other	5th/M	R.I/Sp.	Doc.	Other	5th/M	R.I/Sp.	Doc.	Other	5th/M	R.I/Sp.	Doc.	Other	5th/M	R.I/Sp.	Doc.	Other	n	%
Eastern Kentucky University	12	2	0	0	5	3	0	0	14	2	0	0	10	2	0	0	17	1	0	0	58	10	0	0	68	38.2
Morehead State University	3	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	3	0	0	0	18	0	0	0	18	10.1
Murray State University	3	*	0	0	3	0	0	0	4	0	0	0	3	0	0	0	4	0	0	0	17	0	0	0	17	9.6
University of Kentucky	4	3	0	0	6	0	0	1	9	1	2	0	5	0	1	0	4	0	0	0	28	4	3	1	36	20.2
Western Kentucky University	7	*	0	0	8	3	0	2	8	0	0	0	3	0	0	0	6	0	0	2	32	3	0	4	39	21.9
Total	29	5	0	0	26	6	0	3	39	3	2	0	25	2	1	0	34	1	0	2	153	17	3	5	178	100.0

*Data not available

Table 108

Present Employment of Home Economics Education Graduates from 1979-80 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate school, armed services, unemployed		Don't Know		Total graduates applying for certificate	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Ky University	13	37.1	9	25.8	0	0.0	0	0.0	13	37.1	35	100.0
Ky State University	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0	2	100.0
Morehead State U	11	44.0	5	20.0	2	8.0	3	12.0	4	16.0	25	100.0
Murray State U	19	54.3	5	14.3	5	14.3	5	14.3	1	2.8	35	100.0
Northern Ky University												
University of Ky	14	26.4	21	39.6	0	0.0	2	3.8	16	30.2	53	100.0
University of Louisville												
Western Ky University	11	33.3	15	45.5	0	0.0	5	15.1	2	6.1	33	100.0
Total	68	37.1	55	30.1	7	3.8	15	8.2	38	20.8	183	100.0

Potential Program Changes

Teacher educators were asked if there were any major changes in the future of their programs. The only change indicated was at the University of Kentucky where they hope to add a home economics teacher education position sometime soon.

Summary

During 1984-85 at least 554 individuals were teaching vocational home economics in Kentucky. At least 99 more were teaching home economics in non-vocational programs. The average vocational home economics teacher was almost 40 years old and had taught for 14.7 years.

The new hire rate of 1.3% indicated a low need for replacements at present. However, examination of age and years of experience distributions indicated that a number of teachers might be approaching retirement.

Home economics teachers appeared to be actively earning Rank II certificates, and therefore, master's degrees. In fact, three-fourths of Kentucky vocational home economics teachers held the equivalent of a master's degree or higher.

Most of the home economics teachers received their highest degree at a state university, with Western Kentucky University being most frequently cited.

Eighteen of 22 state-employed teachers reported desiring degree goals higher than they presently held. Overall, data seemed to suggest a general desire or a need for further education for these home economics teachers.

Home economics teacher education has been active in Kentucky since before 1921, beginning at the University of Kentucky and extending presently to six state universities and two independent colleges. During 1984-85, there was a total of 11 faculty members active in home economics education in Kentucky state universities, with a total FTE of 5.40.

The numbers of graduates in home economics education declined somewhat during 1979-84. However, 41 seniors were reported for 1984-85, indicating a rise in numbers. Many home economics education graduates apparently go on for master's degrees, but few were reported as enrolled in Rank I programs.

Home economics graduates apparently enter a number of fields. Follow-up data reported 37.2% known to be in teaching and another

30.1% in a related job such as cooperative extension. The whereabouts of a large group was unknown, leading one to suspect that the numbers of those teaching and in related jobs would actually be higher.

Industrial Arts and Industrial Education Levels I and II

Industrial Arts and Industrial Education Level I and Level II Teachers

State department personnel report that in 1984-85 36 school districts had industrial arts programs. Eighty-one districts had industrial education level I and level II programs. Thirty-three districts had a combination of industrial arts, industrial education level I, and industrial education level II. Thirty other school districts, primarily small independents, had none of these programs.

Industrial arts and industrial education level I and II teachers operate somewhat differently than industrial education level III teachers. They earn bachelor's degrees in their field before taking teaching jobs. They generally teach orientation/exploration courses in junior and senior high schools. All are in local school districts rather than in state-operated schools.

While teaching somewhat different programs, these teachers share some common characteristics and, therefore, will be profiled as a group. In 1984-85 the typical teacher of industrial arts or levels I and II industrial education was 36 to 38 years old with 11 to 13 years of experience. He (only a few were females) probably held a Rank II certificate with a master's degree. He was most likely to have earned his highest degree at Eastern Kentucky University.

Numbers of Teachers

Data from PSD forms reported in Table 109 indicate that in 1984-85 there were 81 industrial arts teachers, 40 industrial education level I teachers, and 190 industrial education level II teachers. Beyond this group of 311 teachers, state department personnel estimated that there were about 65 certified industrial arts teachers who were teaching industrial arts-related practical arts courses and who, therefore, had been counted as part of the practical arts cohort. Further, state department consultants were aware of other teachers certified and teaching in both industrial arts/education and in other areas who were probably counted in the other areas. Therefore, while numbers in this section represent the available data, one must be aware that the count is probably a low one.

Age and Experience

In 1984-85 the average ages of each of these groups of teachers was similar. As seen in Tables 110, 111, and 112, the average industrial arts teacher was 38 years old, the average industrial education level I teacher was 36 years old, and the average industrial education level II teacher was 37 years old. In a similar

Table 109

Numbers of Industrial Arts and Industrial Education Level I and Level II Teachers in 1984-85, by Region

Program	Vocational Regions														Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Industrial Arts	4	10	5	7	1	11	8	1	1	3	1	7	0	22	81
Industrial Education Level I	0	1	2	0	2	1	7	2	3	0	2	4	2	14	40
Industrial Education Level II	10	7	17	9	17	33	26	9	5	5	5	6	11	30	190

Table 110

Ages of 1984-85 Industrial Arts Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	1	0	1	0	1	0	0	0	0	0	0	0	1	4	4.9
26-30	0	1	0	0	0	1	0	0	0	1	0	1	0	4	8	9.9
31-35	0	3	0	1	0	3	4	0	0	1	0	1	0	3	16	19.8
36-40	1	2	1	3	0	0	0	0	0	0	0	3	0	5	15	18.5
41-45	1	1	2	1	1	4	2	0	0	0	0	0	0	5	17	21.0
46-50	2	0	2	0	0	1	1	0	1	1	1	0	0	1	10	12.4
51-55	0	2	0	0	0	1	1	1	0	0	0	0	0	1	6	7.4
56-60	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	3.7
61-65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
65+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	2.5
Total	4	10	5	7	1	11	8	1	1	3	1	7	0	22	81	100.0
Mean Age	44	37	43	35	42	37	39	52	46	34	49	38	0	38	38	

Table 111

Ages of 1984-85 Industrial Education Level I Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2	5.0
26-30	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3	7.5
31-35	0	1	0	0	0	0	4	1	1	0	0	0	1	6	14	35.0
36-40	0	0	0	0	1	0	1	1	1	0	0	0	0	1	5	12.5
41-45	0	0	1	0	0	0	1	0	0	0	0	2	0	1	5	12.5
46-50	0	0	0	0	0	0	0	0	1	0	0	0	0	2	3	7.5
51-55	0	0	0	0	1	1	0	0	0	0	1	1	0	0	4	10.0
56-60	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2.5
61-65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
65+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	0	0	0	0	0	0	1	0	0	0	0	0	0	2	3	7.5
Total	0	1	2	0	2	1	7	2	3	0	2	4	2	14	40	100.0
Mean Age	0	32	34	0	45	51	35	33	39	0	41	42	32	37	36	

Table 112

Ages of 1984-85 Industrial Education Level II Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	0	0	1	0	0	1	2	1	0	1	1	1	4	12	6.3
26-30	2	1	0	4	2	0	8	1	3	1	1	1	2	0	26	13.7
31-35	3	0	3	0	5	5	6	1	1	2	1	2	1	7	37	19.5
36-40	1	1	5	2	6	10	6	2	0	1	0	0	7	9	50	26.3
41-45	2	1	2	1	2	6	4	2	0	0	2	0	0	4	26	13.7
46-50	2	3	4	1	0	7	0	0	0	0	0	1	0	1	19	10.0
51-55	0	1	3	0	1	3	0	1	0	1	0	0	0	2	12	6.3
56-60	0	0	0	0	1	1	1	0	0	0	0	0	0	1	4	2.1
61-65	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.5
65+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3	1.6
Total	10	7	17	9	17	33	26	9	5	5	5	6	11	30	190	100.0
Mean Age	38	43	42	32	37	42	35	35	28	37	33	38	34	37	37	

pattern, the industrial arts teachers reported an average of 13 years of experience; the industrial education level I teachers reported an average of 11 years of experience; and the industrial education level II teachers reported an average of 12 years of experience (Tables 113, 114, and 115.) Due to different education and employment patterns, this group was somewhat younger and had more years of experience in education than the industrial education level III teachers, who averaged 43.6 years of age with 10.2 years of experience.

Further examination of Tables 110 through 115 gives an indication of potential retirements in each region. Only in level II is there a teacher aged 61 or older. A total of eight teachers in all the areas are aged 56-60, or approaching a likely retirement age. Examination of experience levels (Tables 5, 6, and 7) shows a total of four teachers with 30 or more years of experience and a total of 21 teachers with 25-29 years of experience. This would lead one to believe that there are likely to be few retirements in the immediate future, with the possibility of openings a few years in the future.

Teacher Turnover

In reporting years of experience, data in Tables 113, 114, and 115 also give an indication of the current new hire rate. In 1984-85 the new hire rate (the percentage of teachers who were in their first year of teaching or with "0" years of experience) for industrial arts teachers was reported at 4.9%. The new hire rate for industrial educaton level I teachers was 5.0%. The new hire rate for industrial education level II teachers was 5.3%. Ranging from 4.9% to 5.3%, the new hire rate for these teachers was a bit higher than in some of the other vocational areas.

The new hire rate has fluctuated over the last five years for these teachers. Table 116 presents data from PSD reports giving percentages or new hire rates in each program area for five years.

An important factor affecting future turnover, especially in industrial arts, is cancellation of the practical arts programs. As mentioned earlier, state department personnel estimated that about 65 certified industrial arts teachers were teaching primarily practical arts courses in 1984-85. With cancellation of practical arts in 1985, these teachers may have entered the job market. At the same time, state department personnel speculated that some of the industrial arts-related practical arts courses might be continued under industrial arts, thus keeping the teachers. As a result of these unknowns, the demand for new industrial arts teachers during 1985-86 and beyond is rather uncertain.

Rank

Tables 117 through 122 present data on past and present ranks of these teachers. In all areas the same trend is evident over the

Table 113

Years of Experience of 1984-85 Industrial Arts Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	4	4.9
1-4	0	1	0	0	0	1	1	0	0	1	0	1	0	4	9	11.1
5-9	0	4	0	3	0	3	2	0	0	1	0	2	0	3	18	22.2
10-14	1	2	1	0	1	0	1	0	0	0	0	1	0	9	16	19.8
15-19	2	1	2	2	0	3	2	0	0	0	0	1	0	1	14	17.3
20-24	0	1	2	0	0	2	1	1	1	1	1	1	0	1	12	14.8
25-29	0	1	0	0	0	1	1	0	0	0	0	0	0	3	6	7.4
30-34	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	2.5
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
40+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	4	10	5	7	1	11	8	1	1	3	1	7	0	22	81	100.0
Mean Years of Experience	12	12	19	11	10	13	14	24	21	10	24	14	0	12	13	

Table 114

Years of Experience of 1984-85 Industrial Education Level I Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	5.0
1-4	0	0	1	0	0	0	1	0	0	0	0	1	0	0	3	7.5
5-9	0	1	0	0	0	0	3	2	0	0	0	0	2	7	15	37.5
10-14	0	0	0	0	0	0	2	0	3	0	0	0	0	1	6	15.0
15-19	0	0	0	0	2	0	1	0	0	0	1	2	0	4	8	20.0
20-24	0	0	0	0	0	1	0	0	0	0	1	2	0	1	5	12.5
25-29	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2.5
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
40+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	0	1	2	0	2	1	7	2	3	0	2	4	2	14	40	100.0
Mean Years of Experience	0	9	10	0	15	23	10	7	10	0	11	17	6	10	11	

Table 115

Years of Experience of 1984-85 Industrial Education Level II Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	0	0	0	2	0	0	1	1	1	0	2	0	0	3	10	5.3
1-4	1	1	0	3	2	0	5	2	1	1	0	2	2	2	22	11.6
5-9	3	1	4	0	5	2	5	0	2	2	2	1	1	6	34	17.9
10-14	2	1	4	2	5	10	10	3	1	1	0	1	5	12	57	30.0
15-19	3	1	4	1	2	5	4	2	0	0	1	0	3	6	32	16.8
20-24	0	1	3	1	2	9	1	0	0	0	0	1	0	1	19	10.0
25-29	1	2	2	0	0	7	0	1	0	1	0	0	0	0	14	7.4
30-34	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.5
35-39	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.5
40+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	10	16	17	9	17	33	26	9	5	5	5	6	11	30	190	100.0
Mean Years of Experience	12	7	15	7	12	17	9	11	4	11	5	12	10	10	12	

Table 116

New Hire Rates for Kentucky Industrial Arts, Industrial Education Level I, and Industrial Education Level II Teachers, 1980-85

	Industrial Arts			Industrial Education Level I			Industrial Education Level II		
YEAR	n	New Hires	% New Hires	n	New Hires	% New Hires	n	New Hires	% New Hires
1980-81	135	13	9.6	19	0	0.0	192	8	4.2
1981-82	106	7	6.6	25	1	4.0	202	4	2.0
1982-83	98	1	1.0	30	0	0.0	200	10	5.0
1983-84	86	3	3.5	31	2	6.5	204	5	2.5
1984-85	81	4	4.9	40	2	5.0	190	10	5.3

Table 117

Ranks of Kentucky Industrial Arts Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total n
	n	%	n	%	n	%	
1980-81	15	11.1	60	44.4	60	44.4	135
1981-82	17	16.0	59	55.7	30	28.3	106
1982-83	20	20.4	50	51.0	28	28.6	98
1983-84	17	19.8	44	51.2	25	29.1	86
1984-85	18	22.2	43	53.1	20	24.7	81

Table 118

Ranks of Kentucky Industrial Education Level I Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total n
	n	%	n	%	n	%	
1980-81	3	15.8	5	26.3	11	57.9	19
1981-82	4	16.0	9	36.0	12	48.0	25
1982-83	5	16.7	15	50.0	10	33.3	30
1983-84	7	22.6	17	54.8	7	22.6	31
1984-85	10	25.0	22	55.0	8	20.0	40

Table 119

Ranks of Kentucky Industrial Education Level II Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total n
	n	%	n	%	n	%	
1980-81	27	14.1	105	54.7	60	31.3	192
1981-82	32	15.8	121	59.9	49	24.3	202
1982-83	31	15.5	119	59.5	50	25.0	200
1983-84	41	20.1	120	58.9	43	21.1	204
1984-85	43	22.6	105	55.3	42	22.1	190

Table 120

Ranks of Kentucky Industrial Arts Teachers for All Regions, 1984-85

Rank Level	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Rank I															
Teachers	2	2	4	2	0	2	0	0	0	0	0	3	0	3	18
%	50.0	20.0	80.0	28.6	0.0	18.2	0.0	0.0	0.0	0.0	0.0	42.9	0.0	13.6	22.2
Rank II															
Teachers	1	4	1	4	1	6	5	0	0	2	1	3	0	15	43
%	25.0	40.0	20.0	57.1	100.0	54.6	62.5	0.0	0.0	66.7	100.0	42.9	0.0	68.2	53.1
Rank III															
Teachers	1	4	0	1	0	3	3	1	1	1	0	1	0	4	20
%	25.0	40.0	0.0	14.3	0.0	27.3	37.5	100.0	100.0	33.3	0.0	14.3	0.0	18.2	24.7
Total Teachers	4	10	5	7	1	11	8	1	1	3	1	7	0	22	81

Table 121

Ranks of Kentucky Industrial Education Level I Teachers for all Regions, 1984-85

	Vocational Regions														
Rank Level	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Rank I															
Teachers	0	0	1	0	1	0	0	0	2	0	0	1	0	5	10
%	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	66.7	0.0	0.0	25.0	0.0	35.7	25.0
Rank II															
Teachers	0	1	0	0	1	0	6	2	1	0	2	1	2	5	22
%	0.0	100.0	0.0	0.0	50.0	0.0	85.7	100.0	33.3	0.0	100.0	25.0	100.0	35.7	55.0
Rank III															
Teachers	0	0	1	0	0	1	1	0	0	0	0	2	0	4	8
%	0.0	0.0	50.0	0.0	0.0	100.0	14.3	0.0	0.0	0.0	0.0	50.0	0.0	28.6	20.0
Total	0	1	2	0	2	1	7	2	3	0	2	4	2	14	40

Table 122

Ranks of Kentucky Industrial Education Level II Teachers for all Regions, 1984-85

	Vocational Regions														
Rank Level	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Rank I															
Teachers	2	1	10	2	4	7	4	1	0	0	1	0	3	8	43
%	20.0	14.3	58.8	22.2	23.5	21.2	15.4	11.2	0.0	0.0	20.0	0.0	27.3	26.7	22.6
Rank II															
Teachers	7	4	6	2	10	24	15	4	3	2	2	4	6	16	105
%	70.0	57.1	35.3	22.2	58.8	72.7	57.7	44.4	60.0	40.0	40.0	66.7	54.7	53.3	55.3
Rank III															
Teachers	1	2	1	5	3	2	7	4	2	3	2	2	2	6	42
%	10.0	28.6	5.9	55.6	15.7	6.1	26.9	44.4	40.0	60.0	40.0	33.3	18.2	20.0	22.1
Total Teachers	10	7	17	9	17	33	26	9	5	5	5	6	11	30	190

past five years; a general increase in the proportion of Rank I and Rank II teachers, and a decrease in the proportion of Rank III teachers. Tables 10, 12, and 14 detail the ranks held by teachers in each region. This information is provided for the use of universities in planning educational efforts for their particular regions.

Highest or Most Recent Degree or Certificate Completed

While PSD data did not provide direct information about the highest or most recent degree attained, the ranking system allows certain assumptions. Roughly one-fourth of the teachers in all areas held Rank III which can be assumed to represent a bachelor's degree. About one-half of the teachers reported a Rank II, or a master's degree. Another one-fourth reported a Rank I or completion of a master's degree plus 30 hours. One teacher reported no degree.

However, the PSD form did provide information about where teachers earned their highest or most recent degree. These data are provided for each teaching area in Table 123. More teachers, especially Level I teachers, reported earning their highest degree at Eastern Kentucky University than at any other school. Several also earned highest degrees at Western Kentucky University, Morehead State University, and Murray State University. No information was available as to where they earned their first degree.

Teacher Education for Industrial Arts and Industrial Education Levels I and II

Teacher education programs for industrial arts and/or industrial education are operated in five of the state universities and in Berea College. The locations of the state universities offering these programs are shown in Figure 8.

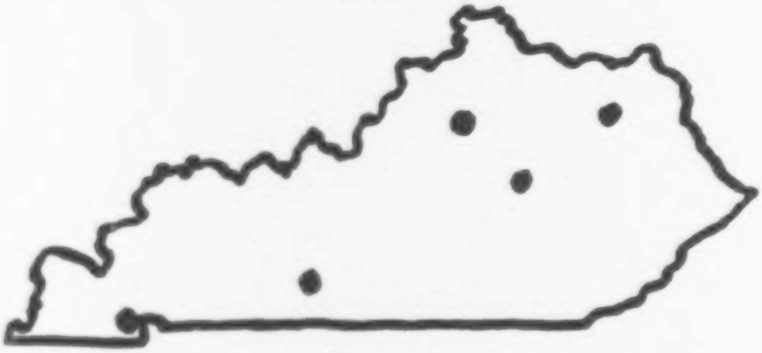

Figure 8

Location of Industrial Arts and Industrial Education Levels I and II Teacher Education Programs in Kentucky State Universities

Table 123

Institutions Where Kentucky Industrial Arts and Industrial Education Levels I and II Teachers Received Their Most Recently Completed Degrees or Certification

Institution	Industrial Arts		Industrial Education, Level I		Industrial Education, Level II	
	n	%	n	%	n	%
Eastern Kentucky University	31	38.3	21	52.5	71	37.4
Kentucky State University	1	1.2	0	0.0	1	0.5
Morehead State University	9	11.1	5	12.5	21	11.0
Murray State University	13	16.1	3	7.5	26	13.7
Northern Kentucky University	3	3.7	3	7.5	4	2.1
University of Kentucky	2	2.5	0	0.0	0	0.0
University of Louisville	1	1.2	0	0.0	4	2.1
Western Kentucky University	16	19.8	3	7.5	49	25.8
Other Schools, In-State	1	1.2	1	2.5	4	2.1
Other Schools, Out-of-State	3	3.7	4	10.0	10	5.3
No Response/ No Degree	1	1.2	0	0.0	0	0.0
Total	81	100.0	40	100.0	190	100.0

Whereas industrial education level III programs are designed to provide teacher training for an individual who previously learned his technical skills in industry, teacher education programs for industrial arts and industrial education levels I and II are designed to provide teacher education for college students who are learning the skills in their undergraduate preservice programs. These teacher education programs are operated in the same manner as other regular four-year teacher education programs. They are found only in the universities that have facilities for training students in technical and industrial skills.

Enrollment Patterns

Teacher educators were asked to describe a typical or recommended enrollment pattern for students in their program area. Responses follow.

Eastern Kentucky University. Students enroll in the four-year program as freshmen or transfer from an unrelated program.

Kentucky State University. Prior to the fall of 1983, students who entered the University registered in the Department of Industrial Education and declared a major. Since 1983 students have been under a different advisement process in which no student is required to declare a major field of study before completing 60 semester hours. Undergraduate students may apply for admission to teacher education upon completing a minimum of 54 semester hours and meeting other criteria.

Morehead State University. After being admitted to the University students declare a major or area of concentration preference. They are assigned an advisor in the Industrial Education Department.

Murray State University. Students enroll in Industrial Education (Levels I and II) as freshmen.

Western Kentucky University. 1. Most come in as teacher education majors. 2. Some will complete a B.S. in Industrial Technology then complete the requirements for teacher education.

Faculty

As in other program areas, the faculty in teacher education for industrial arts and industrial education levels I and II were often shared with other areas within their college or department. As shown in Table 124, during the school year 1984-85 there were a total of 12 people involved in teacher education in this program area, but

Table 124

Industrial Arts/Education Teacher Education Faculty Data, 1984-85

Institution	Highest Degree BA/BS	MA/MS	Doct.	Total n	FTE	Number with K-12 experience
Eastern Ky. University	0	0	2	2	1.50	0
Kentucky State University	0	0	1	1	0.25	1
Morehead State University	0	1	3	4	1.15	0
Murray State University	0	2	2	4	1.50	4
Northern Ky. University						
University of Kentucky						
University of Louisville						
Western Ky. University	0	1	0	1	.25[a]	0
Total	0	4	8	12	4.65	5

[a] Fall semester only in 1984-85

with an FTE of only 4.65. The difference was due to the number of faculty members with split assignments as well as possible part time staff.

Examination of the five previous years (Table 125) reveals a very stable pattern. Over the five years reported in that table the number of faculty members stayed constant at 12, and the FTE stayed constant at 11.0. Comparison with Table indicates that between 1983-84 and 1984-85 the FTE then dropped. The lowered FTE is partly due to greater detail in estimating faculty time in the reporting for 1984-85.

Enrollment and Output

Teacher educators recorded 206 individuals enrolled in Kentucky state universities in preservice industrial arts/education courses during 1984-85. Table 126 shows the distribution of these numbers by university and by class. Differences in when students declare majors would have some effect on numbers at particular universities.

Berea College, the only independent college in Kentucky to offer industrial arts teacher education, responded to an abbreviated form of the teacher education survey. They reported three sophomores, eight juniors, and seven seniors enrolled in industrial education teacher education classes in 1984-85.

Table 127 presents data on graduates from the programs over the previous five years. During that time a total of 286 students graduated from preservice teacher education programs, and 267 of them applied for certificates. Eastern Kentucky University reported 145 graduates, by far the highest output of any of the five schools. If numbers of enrollees are any measure, however, distribution has evened out somewhat as Morehead State University reported 66 enrollees and Eastern Kentucky University reported 63 enrollees in 1984-85. The numbers of graduates each of the past five years are only slightly higher than the number of potential yearly graduates presently coming through the programs, as reflected in Table 126. There appears to be a good supply of these teachers both trained and being trained.

Berea College reported a total of 23 graduates from their program over the past five years: six in 1979-80; four in 1980-81; 4 in 1981-82; four in 1982-83; and five in 1983-84. Eight of these graduates were reported to be in a job requiring a certificate, or in other words, teaching.

Data in Table 128 indicates that 53 students were reported to have been enrolled in some graduate course in 1984-85. Almost all were enrolled in master's degree programs. Out of the 53 students, 35 or 66.0% were enrolled at Morehead State University.

Table 125

Industrial Arts/Education Teacher Education Faculty and Faculty Time Equivalents (FTEs): 1979-1984

Institution	1979-1980		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University	2	2.0	2	2.0	2	2.0	2	2.0	2	2.0
Kentucky State University	1	1.0	1	1.0	1	1.0	1	1.0	1	1.0
Morehead State University	3	2.5	3	2.5	3	2.5	3	2.5	3	2.5
Murray State University	3	3.0	3	3.0	3	3.0	3	3.0	3	3.0
Northern Ky. University										
University of Kentucky										
University of Louisville										
Western Kentucky University	3	2.5	3	2.5	3	2.5	3	2.5	3	2.5
Total	12	11.0	12	11.0	12	11.0	12	11.0	12	11.0

[a] Based on: Full time all year = 1; Part time all year = 0.5

Table 126

Preservice Enrollments for 1984-85 for Industrial Arts/Education Teacher Education in Kentucky State Universities

Institution	Freshmen		Sophomores		Juniors		Seniors		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	15	31.9	21	45.7	17	27.0	10	21.3	0	0.0	63	30.6
Kentucky State University	1	2.1	2	4.4	5	7.9	1	2.1	0	0.0	9	4.4
Morehead State University	20	42.6	11	23.9	28	44.4	6	12.8	1	33.3	66	32.0
Murray State University	11	23.4	9	19.6	9	14.3	12	25.5	2	66.7	43	20.9
Northern Kentucky University												
University of Kentucky												
University of Louisville												
Western Kentucky University	0	0.0	3	6.5	4	6.4	18	38.3	0	0.0	25	12.1
Total	47	100.0	46	100.0	63	100.0	47	100.0	3	100.0	206	100.00

Table 127

Industrial Arts/Education Teacher Education Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating		Total Applying for Certificate
	n	%	n	%	n	%	n	%	n	%	n	%	n
Eastern Kentucky University	28	60.9	22	44.0	34	50.8	32	45.7	29	54.7	145	50.7	129
Kentucky State University	2	4.4	2	4.0	0	0.0	3	4.3	0	0.0	7	2.5	4
Morehead State University	0[a]		12	24.0	15	22.4	17	24.3	6	11.3	50	17.5	50
Murray State University	6	13.0	4	8.0	8	11.9	10	14.3	8	15.1	36	12.6	36
Northern Kentucky University													
University of Kentucky													
University of Louisville													
Western Kentucky University	10	21.7	10	20.0	10	14.9	8	11.4	10	18.9	48	16.8	48
Total	46	100.0	50	100.0	67	100.0	70	100.0	53	100.0	286	100.0	267

[a] Data not provided

Table 128

Industrial Arts/Education Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Institution	5th Year		M.A./M.S.		Rank I		Specialist		Total	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	0	0.0	9	17.3	0	0.0	0	0.0	9	17.0
Kentucky State University										
Morehead State University	0	0.0	35[a]	67.3					35	66.0
Murray State University	1	100.0	8	15.4	0	0.0	0	0.0	9	17.0
Northern Kentucky University										
University of Kentucky										
University of Louisville										
Western Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	1	100.0	52	100.0	0	0.0	0	0.0	53	100.0

[a] "Total in all programs of AS&T"

When teacher educators were asked about the numbers of students who were considered to be enrolled in graduate programs whether or not the students had actually taken a course duing 1984-85, they reported a total of 34 students (Table 129.) This does not represent a true total, as data were not available from Morehead State University. Again, master's degrees were the most popular, with 32 of the 34 students reported being enrolled in master's degree programs.

Data regarding the numbers of students who completed graduate programs at most of the institutions were not available for various reasons. However, Eastern Kentucky University reported 70 completers of fifth year/master's degree programs over the years 1979-80 to 1983-84.

Follow-Up of Graduates

Teacher educators were asked to report what their graduates were currently doing (Table 130.) Again, the data were somewhat incomplete. However, of the 202 individuals included in the report, 122 or 60.4 % were reported to be employed in jobs requiring a certificate or, in other words, teaching. Employment of another 35.1% was unknown.

Potential Program Changes

Teacher educators were asked to describe any potential changes in their programs. The only response came from Eastern Kentucky University. They stated that reorganization was planned, with industrial arts and vocational education under one coordinator.

Summary

Teachers of industrial arts and industrial education levels I and II tended to be a young group with few approaching a likely retirement age. New hire rates that ranged from 4.9% to 5.3%, while low, were higher than new hire rates for many other vocational areas. At the same time, uncertainty regarding the numbers of industrial arts/education teachers to be absorbed from cancelled practical arts programs leaves the future employment situation uncertain.

These teachers are progressing in ranks. At the same time, only one-fourth have attained Rank I, indicating a likely call for graduate work by many of the teachers.

The universities reported considerably more teacher education graduates over the past five years than apparently found regular teaching positions. Some of the new graduates may have found practical arts or other teaching positions and would not have been counted as industrial arts or industrial education teachers. Also not known is the number of industrial arts or industrial education graduates who completed certification requirements as a back-up for

Table 129

Industrial Arts/Education Students Considered to Be Enrolled in a Post-Baccalaureate Program

Institution	M.A./M.S.		Rank I		Total	
	n	%	n	%	n	%
Eastern Kentucky University	3	9.4	0	0.0	3	8.8
Kentucky State University						
Morehead State University	a		a		a	
Murray State University	29	90.6	2	100.0	31	91.2
Northern Kentucky University						
University of Kentucky						
University of Louisville						
Western Kentucky University	0	0.0	0	0.0		
Total	32	100.0	2	100.0	34	100.0

[a] Data not available.

Table 130

Present Employment of Industrial Arts/Education Graduates from 1979-80 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate school, armed services, unemployed		Don't Know		Total Graduates	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Ky University	88	79.3	0	0.0	0	0.0	0	0.0	23	20.7	111	100.0
Ky State University	4	57.1	0	0.0	0	0.0	3	42.9	0	0.0	7	100.0
Morehead State U	a		a		a		a		a			
Murray State U	30	83.3	0	0.0	6	16.7	0	0.0	0	0.0	36	100.0
Northern Ky University												
University of Ky												
University of Louisville												
Western Ky University	0	0.0	0	0.0	0	0.0	0	0.0	48	100.0	48	100.0
Total	122	60.4	0	0.0	6	3.0	3	1.5	71	35.1	202	100.0

[a] Specific data not provided

other professional plans.

It would appear that, at present, there is an adequate supply of teachers of industrial arts and industrial education levels I and II. There also appears to be an an adequate supply of new teachers being trained in the universities.

Industrial Education Level III Teachers

The average technical or industrial education level III teacher is a male about 43 years old who has been in teaching about 10 years. He is most likely to be state-employed, teaching in a vocational school in one of the many occupational areas included under the industrial education umbrella. He worked at least four years or more in his chosen trade before entering the teaching profession. He most likely holds a 64-hour (Rank II) certificate which he earned at one of the state universities after he began teaching, and he is probably not presently enrolled in higher education, although a bachelor's degree is his goal.

Number of Teachers

Any profile of industrial education teachers as a whole, however, cannot do justice to the many facets of this group. As a whole, the 900 technical and industrial education level III teachers comprise one of the larger groups of teachers in vocational education. They are the largest group in the state employment system of vocational teachers, with over 700 teachers (Table 131,) and they comprise a large portion of the teaching staff in any of the vocational schools. Within that group, however, they teach many different trades and skills, under at least 45 different O.E. Codes. Technical instructors teach courses listed with 16.000 O.E. Codes; industrial education level III teachers teach courses given 17.000 O.E. Codes. They generally are experienced in a specific occupational area and, therefore, cannot cross over and teach in other vocational areas within industrial education.

The total number of industrial education level III teachers has declined slightly since 1980-81. While the total number of reimbursed teachers increased from 165 in 1980-81 to 182 in 1984-85, the total number of state-employed teachers declined from 737 in 1980-81 to 698 in 1984-85, leaving a statewide net loss of 22 teachers over the five year span. (These figures do not include technical teachers.)

Data regarding industrial and technical teachers came from several sources. State department personnel supplied a count, augmented by regional directors' reports and the VTDF survey. Information on reimbursed industrial education teachers came from PSD data. A fairly large number of teachers was reported by one of these sources but was not recorded in PSD data or the VTDF survey and, therefore, these teachers were missed in the data collection. Comments by regional directors indicated, in some cases, that missed teachers were evening instructors who were not available when the

Table 131

Number of Technical and Industrial Education Level III Teachers in Kentucky, 1984-85 by Type of Teacher and Vocational Region

Type of Teacher	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Vocational Reimbursed[a]	12	3	0	15	7	89	16	6	17	3	0	2	3	9	182
State-Employed[b]	48	50	37	46	49	61	56	31	45	56	55	25	41	68	718
Total	60	53	37	61	56	150	72	37	62	59	55	77	44	77	800

[a] Information from PSD data.

[b] Information from regional directors and VTDF Survey

forms were filled out. Other "Unknowns" may have been part-time or temporary instructors. Regardless of the reason, these teachers have been included as "Unknown" in tables. In some cases this group of "Unknown" has been combined with other "Unknowns" or "No Response" categories.

In general, technical teachers have been included in this section of the report. Generally their numbers have been included as part of the overall figures. Teacher data was reported in such a way that technical teachers could have been singled out. However, teacher education data made no distinction between technical and industrial education level III students, and therefore, they were combined in other areas as well.

Table 131 records the number of reimbursed teachers and state-employed teachers in each region. Table 132 presents information on numbers of teachers in the various program areas for each region. Auto mechanics, carpentry, electricity, and welding appear to be the largest programs.

As mentioned earlier, these teachers were primarily male. VTDF survey data showed only five females teaching under an industrial education code number.

Age and Experience

In 1984-85 the average technical or industrial education level III teacher was 43.6 years old and had taught for an average of 10.2 years (Tables 133 and 134.) These figures reflect the general practice for industrial education level III teachers and some technical teachers to go into teaching after several years spent in the trade or industry.

Examination of Tables 133 and 134 gives indication of potential retirements statewide and in particular regions. These data also reflect the fact that these teachers tend to be older than vocational teachers in some of the other program areas, but with less teaching experience. This is illustrated by the fact that 61 teachers are aged 61 or older, and 82 more are in the 56-60 age bracket. On the other hand, only 6 teachers had 30 or more years of teaching experience, and 21 teachers had 25-29 years of experience. While a number of these teachers are approaching retirement in terms of years, not as many are approaching the traditional retirement landmark of 30 years of teaching due to their later entry into the teaching field.

Teacher Turnover

Table 134 reports the 1984-85 new hire rate of 4.7% (the percentage of teachers who were in their first year of teaching) for all reporting Kentucky industrial education level III teachers. Table 135 then presents statewide new hire data over the past five years for

Table 132

Numbers of State-Employed Industrial Education Level III and Technical Teachers Under Each Program Title for Each Vocational Region

Program Titles and O.E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Civil & Highway Technology 16.0106	1	0	0	1	0	0	0	0	0	1	1	0	0	0	4
Electronics Technology 16.0108	2	0	0	0	0	0	3	0	0	4	0	0	0	0	9
Manufacturing Technology 16.0111	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Instrumentation 16.0112	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Welding Technology 16.0610	1	0	0	0	0	0	1	0	0	0	1	0	0	0	3
Drafting Technology 16.0620	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Machine Tool Technology 16.0630	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1

Table 132 Continued

Program Titles and O.E. Codes	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Air Conditioning 17.0100	1	3	0	2	5	4	3	1	1	1	1	2	0	3	27
Appliance Repair 17.0200	1	0	0	0	2	0	0	0	0	0	1	1	1	0	6
Auto Body Repair 17.0301	6	3	1	1	1	3	4	2	2	2	3	4	3	3	38
Auto Mechanics 17.0302	6	6	6	7	10	8	7	5	4	6	4	8	8	10	95
Oilfield Tech 17.0305	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Auto Parts 17.0399	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Aircraft Mechanics 17.0401	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Commercial Art 17.0700	0	0	0	0	0	2	1	0	0	0	0	1	0	0	4
Radio & TV Production 17.0900	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Building Maintenance 17.1000	0	1	0	0	0	1	1	0	0	0	0	1	0	0	4

Continued

Table 132 Continued

Program Titles and O.E. Codes	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Carpentry 17.1001	4	4	4	5	6	6	4	4	4	5	6	6	3	5	66
Heavy Equip. Operator 17.1003	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Masonry 17.1004	2	2	1	1	0	3	2	0	0	0	1	2	0	3	17
Interior Finishing 17.1005	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Plumbing 17.1007	0	0	1	1	0	3	1	0	0	0	0	0	0	2	8
Heavy Equip. Repair 17.1013	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Mine Maintenance Technology 17.1093	0	1	0	0	0	0	0	0	0	4	4	1	0	0	10
Industrial Machine Maintenance 17.1099	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Diesel Mechanics 17.1200	1	1	1	1	2	2	2	2	0	2	2	4	2	1	23

Continued

Table 132 Continued

Program Titles and O.E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Drafting 17.1300	2	1	0	5	3	1	3	2	5	3	3	4	1	5	38
Electricity 17.1401	3	6	5	4	3	6	4	5	7	10	5	7	3	9	77
Electronics 17.1502	1	1	1	5	2	4	1	0	4	0	1	0	1	3	24
Radio & TV Repair 17.1503	0	0	1	0	1	2	1	0	1	0	0	2	0	1	9
Graphic Arts 17.1900	1	0	0	1	0	4	1	0	0	1	0	0	1	2	11
Machine Shop 17.2302	3	4	3	5	2	3	2	0	3	2	2	4	6	6	45
Sheet Metal 17.2305	0	0	1	0	0	0	3	0	0	0	0	0	0	0	4
Welding 17.2306	3	8	6	5	6	7	5	4	7	6	4	10	7	7	85
Tool & Die Making 17.2307	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Meat Cutting 17.2903	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2

Continued

Table 132 Continued

Program Titles and O.E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Small Engine Repair 17.3100	1	1	0	1	0	1	0	0	0	0	0	0	0	0	4
Tailoring 17.3302	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Upholstery 17.3500	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
Cabinet Maker 17.3601	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
General Miner 17.9902	0	0	0	0	0	0	0	0	0	2	1	2	0	0	5
Technical Related 17.9908	0	1	0	1	2	0	1	0	1	0	2	1	1	1	11
Mine Equip. Operator 17.9910	0	1	0	0	0	0	0	0	0	0	1	1	0	0	3
Industrial Worker 17.9920	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
MSHA Instruction Coordinator 17.9950	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Unknown	8	4	4	0	0	0	4	5	3	7	10	12	0	4	61
Total	48	50	37	46	49	61	56	31	45	56	55	75	41	68	718

Table 133

Ages of 1984-85 - Technical and Industrial Education Level III Teachers

Age Group	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
21-25	0	0	1	1	1	1	1	0	0	0	0	2	0	1	8	0.9
26-30	3	7	2	6	8	11	6	4	4	4	5	2	3	4	69	7.7
31-35	9	6	3	4	11	13	14	3	12	9	10	14	4	16	128	14.2
36-40	9	11	4	11	14	12	18	7	10	11	7	11	11	16	153	17.0
41-45	5	6	6	8	8	30	5	5	5	4	7	5	6	14	114	12.7
46-50	7	9	3	8	4	20	7	2	10	7	8	9	6	9	109	12.1
51-55	7	5	7	11	3	22	9	3	10	6	2	3	9	8	105	11.7
56-60	11	3	1	2	5	21	3	4	4	6	5	12	3	2	82	9.1
61-65	1	2	6	7	2	16	0	3	3	5	1	7	1	2	56	6.2
65+	0	0	0	1	0	2	1	0	0	0	0	0	1	0	5	0.6
Unknown	8	4	4	2	0	2	7	6	4	7	10	12	0	5	71	7.9
Total	60	53	37	61	56	150	72	37	62	59	55	77	44	77	900	100.0
Mean Age	45.3	42.3	46.5	45.0	40.6	46.7	40.4	43.9	43.4	44.4	42.1	44.7	44.8	41.1	43.6	

Table 134

Years of Experience of 1984-85 Technical and Industrial Education Level III Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	3	5	3	1	6	7	3	2	2	1	2	2	0	5	42	4.7
1-4	6	10	5	10	13	24	11	6	13	12	15	13	5	17	160	17.8
5-9	18	17	19	10	19	26	27	9	14	15	9	18	9	24	224	24.9
10-14	15	10	7	16	8	19	18	7	19	7	10	16	18	18	188	20.9
15-19	5	5	7	15	9	27	7	6	9	6	6	12	7	5	126	14.0
20-24	5	2	2	7	1	34	1	1	2	5	2	3	3	3	71	7.9
25-29	0	0	0	2	0	8	1	1	0	4	1	1	2	1	21	2.3
30-34	0	0	0	0	0	4	0	0	0	1	0	0	0	0	5	0.5
35-39	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0.1
40+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	8	4	4	0	0	0	4	5	3	8	10	12	0	4	62	6.9
Total	60	53	37	61	56	150	72	37	62	59	55	77	44	77	900	100.0
Mean Years of Experience	9.3	8.0	8.7	11.8	8.1	13.2	8.3	93	9.2	133	8.5	9.9	11.9	8.1	10.2	

Table 135

New Hire Rates for Kentucky Reimbursed Industrial Education Level III Teachers, 1980-85

		0 Years Experience	
YEAR	Total Teachers	n	% or "New Hire Rate"
1980-81	165	2	1.2
1981-82	174	3	1.7
1982-83	173	3	1.7
1983-84	179	3	1.7
1984-85	182	4	2.2

reimbursed level III teachers. It would seem that the new hire rate for the reimbursed group has remained fairly low and fairly constant over the last five years. This year's new hire rate of 2.2% for reimbursed level III teachers contrasts somewhat with the state-employed new hire rate of 4.7%.

Rank

The system of ranks for technical and level III teachers differs from the system for some of the other vocational areas. Like health and personal services instructors, many industrial education level III teachers enter teaching before earning teaching credentials. Therefore, Rank III is issued to industrial education level III teachers who have begun teaching but who have not yet earned the 64-hour certificate or a bachelor's degree. Rank II is awarded to those who have completed the 64-hour requirement and two years of teaching. Rank I is given upon completion of a bachelor's degree and a total of four years of teaching experience.

When considering reimbursed level III teachers, Table 136 records a decreasing number of Rank III teachers and a generally increasing number of Rank I teachers over the past five years. Examination of Table 137 shows that almost half (46.4%) of all technical and industrial education level III teachers held a Rank II in 1984-85. Another 20.8% held a Rank I certificate. Threfore, about 67% had completed at least a 64-hour program (or a 24-hour program if before 1977) or higher.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were asked to indicate the highest degree or certificate they had completed. Results reported in Table 138 (along with degree goals) show that of state-employed teachers 149, or 20.8%, had not yet received a degree or certificate while 98 (13.6%) had received the earlier 24-hour certificate and 208 (29.0%) had received the more recent 64-hour certificate. Another 101 (14.1%) had earned bachelor's degrees and 62 (8.6%) had earned advanced degrees. It should be noted that while these figures included technical teachers, the technical teachers actually had a higher rate of bachelor's degrees or above. Five (25%) of the 20 technical teachers reported bachelor's degrees, and three (15%) reported degrees above a bachelor's.

While similar information on the highest degree was not available from the PSD data for reimbursed level III teachers, rank data in Table 136 for reimbursed teachers and in Table 137 for all reporting technical and industrial education level III teachers can be assumed to reflect the highest degree held by these teachers across the state.

Both the PSD form and the VTDF survey requested information

Table 136

Ranks and Percentages of Kentucky Reimbursed Industrial Education Level III Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total n
	n	%	n	%	n	%	
1980-81	7	4.2	94	57.0	64	38.8	165
1981-82	43	24.7	76	43.7	55	31.6	174
1982-83	49	28.3	76	43.9	48	27.8	173
1983-84	57	31.8	83	46.4	39	21.8	179
1984-85	52	28.6	92	50.6	38	20.9	182

Table 137

Ranks of all Kentucky Industrial Education Level III Teachers, 1984-85, for all Regions

Rank Level	Vocational Regions														Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Rank I															
Teachers	14	11	12	8	11	45	11	5	17	7	6	8	8	24	187
%	23.3	20.8	32.4	13.1	19.6	30.0	15.3	13.5	27.4	11.9	10.9	10.4	18.2	31.2	20.8
Rank II															
Teachers	28	22	14	40	23	65	35	17	25	30	20	38	31	30	418
%	46.7	41.5	37.9	65.6	41.1	43.3	48.6	46.0	40.3	50.8	36.4	49.3	70.5	39.0	46.4
Rank III															
Teachers	10	16	7	11	21	39	22	10	15	15	19	17	5	19	226
%	16.7	30.2	18.9	18.0	37.5	26.0	30.6	27.0	24.2	25.4	34.5	22.1	11.4	24.7	25.1
Unknown															
Teachers	8	4	4	2	1	1	4	5	5	7	10	14	0	4	69
%	13.3	7.6	10.8	3.3	1.8	0.7	5.5	13.5	8.1	11.9	18.2	18.2	0.0	5.2	7.7
Total Teachers	60	53	37	61	56	150	72	37	62	59	55	77	44	77	900

Table 138

Degree Goals of 1984-85 State-Employed Industrial Education Level III Teachers
Distributed in Relation to Highest Degree Presently Held

Highest Degree/ Certificate Presently Held	Degree Goal									Total	
	24 Hr.	64 Hr.	Bachelor's	5th Yr.	Master's	Master's +30	Doctor-ate	Other	No Resp/ Unknown	n	%
None	0	66	50	2	13	0	3	3	12	149	20.8
24 Hr.	0	20	18	0	1	0	0	5	54	98	13.6
64 Hr.	1	44	82	2	15	4	4	3	53	208	29.0
Bachelor's	0	0	2	4	41	8	10	3	15	101	14.1
5th Year	0	0	1	2	4	1	0	0	2	10	1.4
Master's	0	0	0	0	10	10	11	0	13	44	6.1
Master's +30	0	0	0	0	0	0	2	0	6	8	1.1
Other	0	3	3	0	0	0	0	4	4	14	1.9
No Response/ Unknown	0	5	8	0	3	0	0	1	69	86	12.0
Total	1	138	182	10	87	23	30	19	228	718	100.0

about the institution from which teachers received their highest or most recent degree or certificate. As seen in Table 139, a large group (32.1%) did not respond, indicating probably that they had not received any degree or certificate. More teachers indicated thay had received their first degree from Murray State University (14.7% of the total teachers) or Eastern Kentucky University (12.2%) than from any other school. Fourteen cited out-of-state schools, and fourteen cited in-state schools other than the state universities. A number of these other programs were associate degrees earned in technical programs and community colleges.

Data shown in Table 139 also provided information regarding the regions served by each university. Out of the teachers who provided the name of the institution where they received their most recent or highest degree, about four-fifths of the teachers were currently employed in the same region where that university was located, or in one of the bordering regions. Ninety-two teachers held jobs farther afield. This trend to employment near where one gets one's degree is not surprising, since these teachers, like other vocational teachers, are usually fully employed while also attending the university. At the same time, it should be noted that some of the universities served a wide number of regions. Murray State University, for example, while located in Region 1 and touching only Region 2, also served 21 students in Region 3 and 45 students in Region 6.

Present Enrollment in Higher Education

Analysis of VTDF survey data provided considerable further information on state-employed teachers. Since this represents such a large percentage of all industrial education level III teachers, the data will be presented here in more detail than has been done for some of the other vocational groups.

State-employed teachers were asked to indicate if they were presently enrolled in some university program, and if so where it was. Of the total group of state-employed teachers 319, or 44.4%, indicated enrollment in some type of education. As Table 140 indicates, 160 (22.3%) were in 64-hour programs. Ninety-four (13.1%) were enrolled in bachelor's degree programs, 49 (6.8%) were in fifth-year or master's degree programs, and eight (1.1%) were in master's-plus-30-hours programs. Five teachers listed "Other" programs. Almost half (338 teachers or 47.1%) did not respond to the item, presumably indicating that they were not currently enrolled in any program of higher education.

As Table 141 indicates, Eastern Kentucky University had the most industrial education level III with 90 teachers indicating enrollment. Morehead State University had 61 enrollees, Western Kentucky University had 57 enrollees, Murray State University had 50 enrollees, and the University of Louisville had 32 enrollees.

Table 139

Institutions Where Kentucky 1984-85 Industrial Education Level III Teachers Received Their Highest or Most Recently Completed Degree or Certification

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	2	1	4	4	8	1	0	14	15	23	5	33	110	12.2
Kentucky State University	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.1
Morehead State University	0	0	0	1	1	1	1	18	34	13	3	0	0	0	72	8.0
Murray State University	37	28	21	0	0	45	0	0	0	0	0	1	0	0	132	14.7
Northern Ky University	0	0	0	0	0	0	28	0	0	0	0	0	0	0	28	3.1
University of Kentucky	0	1	0	2	5	10	2	1	0	3	5	9	3	14	55	6.1
University of Louisville	0	0	0	0	1	38	0	0	0	0	0	0	0	0	39	4.3
Western Ky University	0	2	1	41	15	4	0	0	0	0	0	1	21	0	85	9.4
Other Schools In-State	0	0	0	0	0	2	0	0	1	0	1	5	3	2	14	1.6
Other Schools Out-of-State	0	0	0	1	0	5	3	0	0	1	0	4	0	0	14	1.6
No Response/ No Degree	15	18	9	15	30	40	26	12	24	21	21	27	12	24	289	32.1
Unknown	8	4	4	0	0	0	4	5	1	7	10	12	0	4	61	6.8
Total	60	53	37	61	56	150	72	37	[illegible]	52	56	77	44	77	900	100.0

Table 140

Numbers of State-Employed Kentucky Technical Industrial Education Level III Teachers Who Were Enrolled in Higher Education in 1984-85

Program	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
No Response/ Not Enrolled	23	23	19	31	23	26	33	13	17	20	24	33	23	30	338	47.1
64 Hr.	6	11	5	7	20	17	11	6	12	15	15	13	9	13	160	22.3
B.A./B.S.	3	5	6	4	2	11	6	3	7	8	5	13	7	14	94	13.1
5th Year	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0.3
M.A./M.S.	7	6	3	3	1	7	1	3	4	2	1	4	2	5	49	6.8
Master's +30	1	1	0	0	2	0	0	1	1	1	0	0	0	1	8	1.1
Doctorate	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.1
Other	0	0	0	0	1	0	1	0	1	2	0	0	0	0	5	0.7
Unknown	8	4	4	0	0	0	4	5	3	7	10	12	0	4	61	8.5
Total	48	50	37	46	49	61	56	31	45	56	55	75	41	68	718	100.0

Table 141

Institutions Where Kentucky State-Employed Technical and Industrial Education Level III Teachers Were Enrolled in 1984-85, Distributed by Regions

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	0	0	0	0	0	0	0	5	23	30	10	22	90	12.5
Kentucky State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Morehead State University	0	0	0	0	0	1	0	13	26	20	1	0	0	0	61	8.5
Murray State University	18	21	11	0	0	0	0	0	0	0	0	0	0	0	50	7.0
Northern Ky University	0	0	0	0	0	0	20	0	0	1	0	0	0	0	21	2.9
University of Kentucky	0	0	0	0	2	2	1	0	0	0	0	1	2	13	21	2.9
University of Louisville	0	0	0	0	0	32	0	0	0	0	0	0	0	0	32	4.5
Western Ky University	0	2	2	16	27	1	0	0	0	0	0	0	9	0	57	7.9
Other Schools In-State	1	0	0	0	0	0	1	0	0	0	0	2	0	0	3	0.4
Other Schools Out-of-State	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0.3
No Response/ No Degree	21	23	20	30	20	25	30	13	16	23	21	29	20	29	320	44.6
Unknown	8	4	4	0	0	0	4	5	3	7	10	12	0	4	61	8.5
Total	49	50	37	46	49	61	51	31	45	36	55	75	41	68	718	100.0

Northern Kentucky University and the University of Kentucky followed with 21 enrollees at each institution.

Examination of regional distribution reveals that only nineteen enrollees in state universities were employed farther afield from that university than the same region or a bordering region. Of that group of nineteen, eleven were Region 3 teachers enrolled at Murray State Unversity. It would appear that the trend to go to school reasonably near where one works was well established with this group.

Degree Goals

State-employed teachers were asked about their degree goals. Responses regarding degree goals in relation to the highest degree already held are presented in Table 138. In order to properly answer this question, two responses from teachers were needed. They had to indicate the highest degree they already held, and they also had to indicate which of several degrees or certificates they considered to be their goal. No response on one item or the other made impossible any determination for that particular subject. Eliminating the "No response" or "Unknown" categories as well as "Other" left a pool of 431 teachers for this item. Of this group of 431 teachers, 371 were reported seeing as a goal some level of education higher than the degree they currently held. As indicated in Table 138, many of these were in the group of those who currently held no on-going certificate and who would, therefore, be compelled by certification laws to work on a 64-hour certificate or higher if they wished to stay in teaching. Another large group was that of 64-hour people aspiring to a bachelor's degree. Overall, a large proportion of level III teachers apparently aspired to further their educaton.

Degree goals distributed by region are presented in Table 142. Although this table does not give any indication as to which of the degree goals might already have been reached, it does present information that regional directors and teacher educators who are familiar with the regions may find useful in planning further educational efforts.

Institution Awarding First Degree

Data regarding where teachers reported earning their first degree or certificate showed that the highest number of degrees or certificates were earned at Eastern Kentucky University (105 or 14.6%). Murray State University (69 or 9.6%) and Western Kentucky State University (62 or 8.6%) were next. Fifty-four teachers (7.5%) listed the University of Kentucky, 53 (7.4%) listed Morehead State University, 26 (3.6%) listed Northern Kentucky University, and 14 (2.0%) listed the University of Louisville. Another 24 (3.3%) indicated receiving their first degree or certificate from "Other Schools, In-State,) and 19 (2.7%) indicated "Other Schools,

Table 142

Degree Goals of 1984-85 State-Employed Industrial Education Level III Teachers, by Region

Degree Goal	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
24 Hr.	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.1
64 Hr.	10	12	6	13	16	12	11	1	8	11	12	7	10	8	137	19.6
Bachelor's	5	11	7	9	16	15	17	10	9	14	12	16	11	25	177	25.3
5th Year	0	0	1	2	0	1	0	0	1	0	1	0	0	3	9	1.3
Master's	7	8	6	5	0	11	1	5	10	3	5	3	2	14	80	11.5
Master's +30	4	3	2	1	3	3	1	0	2	0	0	2	0	2	23	3.3
Doctorate	2	2	0	2	2	2	2	2	2	4	0	3	3	3	29	4.1
Other	0	2	0	2	1	2	3	1	1	1	0	2	3	0	18	2.6
No Response	8	8	9	11	11	15	13	6	8	11	13	29	12	9	163	23.3
Unknown	8	4	4	0	0	0	4	5	3	7	10	12	0	4	62	8.9
Total	44	50	35	45	49	61	52	30	45	51	53	74	41	68	698	100.0

Out-of-State." No response (possibly indicating no degree) was given by 231 teachers (32.2%), and another 61 teachers (8.5%) were not accounted for in the VTDF survey.

Kentucky Industrial Education Level III Teacher Education

Seven out of the eight Kentucky state universities provide programs of teacher education for the certification and education of industrial technical and education level III teachers. The geographic location of these schools is shown in Figure 9.

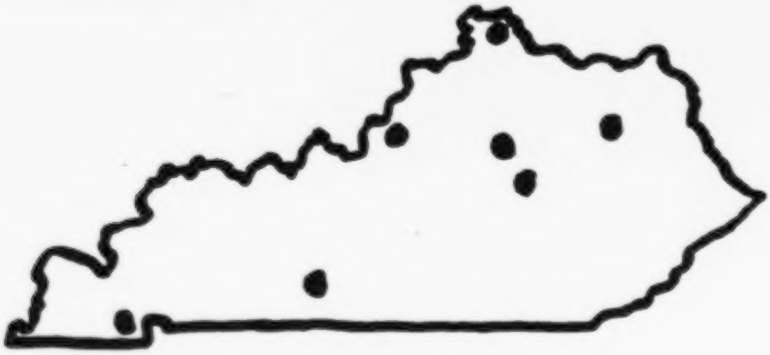

Figure 9

Location of Kentucky Industrial Education Level III Teacher Education Programs

Basic to the design of these programs is the assumption that the teachers have already become skilled in their trade or profession, and thus need primarily to study professional teaching skills and other academic subjects. Therefore, these teacher education programs are not dependent on shops and extensive equipment, but rather on the same basic facilities required by other teacher education program areas.

Enrollment Patterns

A few industrial education students prepare for level III teaching certificates through the traditional route of four years of preservice college leading to certification and followed by their first teaching job. Most, however, earn a 64-hour certificate or a B.S. degree while also teaching. Some of that procedure is reflected in the following responses teacher educators gave when asked to describe the typical or recommended enrollment patterns for their students.

Eastern Kentucky University. Students are enrolled in the Industrial Education program for a four-year planned program.

Morehead State University. The enrollment pattern for the Department of Industrial Education students at the undergraduate level normally follows the sequence from the preparation level in-service certification to Associate Degree, then into the Baccalaureate Preparation Level Teacher Education Program. Students in the Pre-Service option normally go into the Associate Degree and then the Baccalaureate Preparation Level Teacher Education Program which includes a Supervised Work Experience component of a minimum of 2000 hours.

Murray State University. Students will enroll in Industrial Education, Vocational Technical Education option, from the beginning.

Northern Kentucky University. Students enroll in one of the following:

B.S. in Industrial Education
A.A.S. in Industrial Education

University of Kentucky. Students typically complete the 64 sem. hr. planned program for the five (5) year certificate. Students may then apply those semester hours toward the B.S. degree in Vocational Industrial Education. (Students enroll in the 64 hour program after they are employed as teachers.)

University of Louisville. Students enroll in Arts and Sciences for two years and transfer to the School of Education for their junior and senior years. (No one gets into School of Education until they get 60 hours.)

Western Kentucky University. Enroll in Industrial Education as freshmen.

Faculty

Teacher educators were asked to report the numbers of full time and part time faculty members in their field over the past five years. Unless more detailed information was provided, faculty members reported for 1979-1984 were recorded as 1.0 full-time equivalent (FTE) if full time and 0.5 FTE if part time. For most of the 1984-85 faculty a more precise percentage was provided by the teacher educators. If this was not available, 1.0 FTE and 0.5 FTE were used for full time and part time.

As of 1984-85, a total of 13 faculty members were involved in industrial education level III teacher education in Kentucky (Table 143.) Ten of the group held doctorates and three held master's degrees. Although most if not all of the faculty members were full time employees, many had responsibilities in more than one area. As a result, the full time equivalent for teacher education faculty in industrial education level III was 7.875.

Table 143

Industrial Education Level III Faculty Degrees, FTEs, and K-12 Experience; 1984-85

Institution	Highest Degree			Total	FTE	Faculty with K-12 experience
	BA/BS	MA/MS	Doct.	n		
Eastern Ky. University	0	0	2	2	1.75	2
Kentucky State University						
Morehead State University	0	1	3	4	1.55	4
Murray State University	0	1	2	3	1.75	3
Northern Ky. University	0	0	1	1	0.60	1
University of Kentucky	0	0	1	1	0.85	1
University of Louisville	0	0	1	1	1.00	1
Western Ky. University	0	1	0	1	0.375[a]	1
Total	0	3	10	13	7.875	13

[a] Faculty members on staff fall of 1984 only; new faculty members will be on staff starting fall 1985.

Looking at the faculty numbers over the previous five years, one can see a trend downward in actual numbers of people (Table 144.) The decline in faculty members has been most pronounced at the University of Kentucky where three retirees were not replaced.

Enrollment and Output

For industrial education level III programs, the enrollment figures extended to include a few freshmen, sophomores, juniors, and seniors in the regular 4-year program, as well as those students who were enrolled in a 64 hour inservice program or a 64 hour/bachelor's degree program and who made up the majority of the programs.

As shown in Table 145, 27 students were listed as regular preservice undergraduates, while 531 other students were enrolled in either a 64-hour program or in a 64-hour program leading to a bachelor's degree.

Teacher educators also reported numbers of students graduating from their undergraduate programs. These included 64-hour completers, 64-hour-plus-bachelor's degree (in-service bachelor's degree) completers, and any four-year preservice graduates they might have. They reported a total of 215 graduates during the years 1979 to 1984 (Table 146) which were spread fairly evenly over the five years of record.

Data on graduate students were also collected. Teacher educators were asked to report numbers of students who were enrolled in some graduate course in 1984-85 as well as those who were considered enrolled in some graduate program even though they may not have taken a course during 1984-85. A total of 123 level III students were enrolled in some course that year, with 51.2 % being at Murray State University (Table 147.) Most of these students were enrolled in master's degree courses, regardless of where they went to school.

The same was generally true of students who were considered to be enrolled in some program, whether or not they had been in classes in 1984-85 (see Table 148.) Of the 184 students reported, almost three-fourths were in master's degree programs. Over half (53.8%) of the total was enrolled at Murray State University.

These figures do not represent the total number of industrial education level III teachers who are enrolled in graduate school courses and programs. Some data was not available. Enrollment figures given by state-employed teachers were presented earlier in Table 140. Observers will note that numbers reported in that table do not match up to numbers reported in Table 147 and 148. Although there are many potential reasons for the discrepancy, one of the major possibilities is that, depending on university organization and

Table 144

Industrial Education Level III Faculty and Faculty Time Equivalents (FTEs): 1979-1984

Institution	1979-1980		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University	2	2.0	2	2.0	2	2.0	2	2.0	2	2.0
Kentucky State University										
Morehead State University	2	2.0	2	2.0	2	2.0	2	2.0	2	2.0
Murray State University	3	1.25	3	1.25	3	1.5	3	1.25	3	1.25
Northern Ky. University	1	1.0	1	1.0	1	1.0	1	1.0	1	1.0
University of Kentucky	4	4.0	4	4.0	2	1.5	1	1.0	1	1.0
University of Louisville	3	2.0	3	2.0	2	1.5	1	1.0	3	2.0
Western Kentucky University	1	1.0	1	1.0	1	1.0	1	1.0	1	1.0
Total	16	13.25	16	13.25	13	10.5	11	9.25	13	10.25

Table 145

Undergraduate Enrollments for 1984-85 in Industrial Education Level III Teacher Education

Institution	Freshmen		Sophomores		Juniors		Seniors		64 Hr.		64 Hr/B.S.	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	4	66.6	2	40.0	1	20.0	8	72.7	31	10.5	29	12.3
Kentucky State University												
Morehead State University	1	16.7	2	40.0	2	40.0	1	9.1	60	20.3	25	10.6
Murray State University	1	16.7	1	20.	0	0.0	0	0.0	72	24.4	32	13.5
Northern Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	27	9.2	11	4.7
University of Kentucky	0	0.0	0	0.0	0	0.0	0	0.0	10	3.4	8	3.4
University of Louisville	0	0.0	0	0.0	2	40.0	2	18.2	60	20.3	70	29.7
Western Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	35	11.9	61	25.8
Total	6	100.0	5	100.0	5	100.0	11	100.0	295	100.0	236	100.0

Table 146

Kentucky Industrial Education Level III Graduates, 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84		Total Graduating	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	12	38.3	12	29.3	14	27.5	8	18.6	8	18.2	54	25.1
Kentucky State University												
Morehead State University	15	41.7	13	31.7	12	23.5	12	27.9	11	25.0	63	29.3
Murray State University	2	5.6	5	12.2	11	21.6	12	27.9	15	34.1	45	20.9
Northern Kentucky University	7	19.4	8	19.5	10	19.6	6	14.0	6	13.5	37	17.2
University of Kentucky	0	0.0	3	7.3	2	3.9	3	7.0	2	4.6	10	4.7
University of Louisville	0	0.0	0	0.0	2	3.9	2	4.6	2	4.6	6	2.8
Western Kentucky University	[a]		[a]		[a]		[a]		[a]		[a]	
Total	36	100.0	41	100.0	51	100.0	43	100.0	44	100.0	215	100.0

[a] Data not provided.

Table 147

Industrial Education Level III Students Enrolled In Some Post-Baccalaureate Course in 1984-85

Institution	5th Year		M.A./M.S.		Rank I		Doctorate		Total	
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	0	0.0	5	4.7	0	0.0	0	0.0	5	4.1
Kentucky State University										
Morehead State University	0	0.0	26	24.3	2	25.0	1	20.0	29	23.6
Murray State University	1	33.3	56	52.3	6	75.0	0	0.0	63	51.2
Northern Kentucky University	2	66.7	5	4.7	0	0.0	0	0.0	7	5.7
University of Kentucky	0	0.0	5	4.7	0	0.0	2	40.0	7	5.7
University of Louisville	0	0.0	10	9.3	0	0.0	2	40.0	12	9.7
Western Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	3	100.0	107	100.0	8	100.0	5	100.0	123	100.0

Table 148

Industrial Education Level III Students Enrolled in a Post-Baccalaureate Program: 1984-85

Institution	Level								Total	
	5th Year		M.A./M.S.		Rank I		Doctorate			
	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	0	0.0	6	4.4	0	0.0	0	0.0	6	3.3
Morehead State University	2	66.7	35	25.7	0	0.0	0	0.0	37	20.1
Murray State University	1	33.3	70	51.5	28	73.7	0	0.0	99	53.8
Northern Kentucky University [a]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
University of Kentucky	0	0.0	5	3.7	0	0.0	3	42.9	8	4.3
University of Louisville	0	0.0	20	14.7	10	26.3	4	57.1	34	18.5
Western Kentucky University[a]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	3	100.0	136	100.0	38	100.0	7	100.0	184	100.0

[a] Students would enroll in education rather than vocational education.

teacher choice, some teachers may have been enrolled in a general education program which would not show up in Tables 147 or 148.

Graduate degrees or certificate completions were also recorded (Table 149.) A total of 120 completions were spread across the five years. Rank I/Specialist completions accounted for four or five per year. Master's degree/5th year completions went from a high of 25 in 1979-80 to a low of 16 in 1980/81 and 1981-82, and then rose again to 20 in 1982-83 and in 1983-84. Morehead, with 28.3 %, and Murray State University, with 30.0 %, had the highest numbers of students.

Follow-Up of Graduates

It would appear that when industrial education level III teachers earn certification, they teach! Out of 199 graduates recorded for the past five years, 186 or 93.5% were reported to be in a job requiring certification or, in other words, teaching (Table 150.) This high percentage results, of course, from their earning their degree or certification after employment in a teaching position.

Potential Program Changes

Teacher educators were asked to describe any potential changes in their programs. Responses are presented here.

Eastern Kentucky University. Combine Vocational-Industrial and Industrial Arts Education under one coordinator.

Northern Kentucky University. The B.S. degree will be implemented; A.A.S. will be reorganized; Post-Baccalaureate will be reorganized.

University of Louisville. "Our department offers both a degree for vocational teacher education and training. Therefore, our faculty work with students from both programs. The non-certification option seems to be increasing in terms of student numbers, while the certification/B.S. degree program is holding somewhat constant."

Summary

Technical and Industrial education level III teachers were the second largest group of vocational teachers in Kentucky, and the largest group in the state-operated system. They taught under at least 45 different O.E. codes, with the largest numbers being in auto mechanics, carpentry, electricity, and welding. They tended to be slightly older as a group (especially in relation to their years of experience) than teachers in some of the other vocational areas. As a result, a number were approaching retirement age and may need to be replaced in a few years. At the same time, the new hire rate of 4.7% among state-employed industrial education level III teachers indicated a present on going need for some of these teachers.

Table 149

Graduate Program Completions for Industrial Education
Level III Teacher Education

Institution	1979-1980		1980-1981		1981-1982		1982-1983		1983-1984		Sub Total		Grand Total	
	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	5th/ M	Rank I/ Spec.	n	%
Eastern Ky. University	4	0	3	0	1	0	1	0	3	0	12	0	12	10.0
Kentucky State University														
Morehead State University	7	0	6	0	6	2	5	2	4	2	28	6	34	28.3
Murray State University	11	2	3	1	4	0	8	0	6	1	32	4	36	30.0
Northern Ky. University	3	0	4	0	3	0	4	0	4	0	18	0	18	15.0
University of Kentucky	0	3	0	3	0	2	0	3	0	2	0	13	13	10.8
University of Louisville	0	0	0	0	2	0	2	0	3	0	7	0	7	5.8
Western Ky.[a] University													a	
Total	25	5	16	4	16	4	20	5	20	5	97	23	120	100.0

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[a] Students earn graduate degrees in education, not in vocational education.

Table 150

Present Employment of Industrial Education Level III Graduates from 1979-80 to 1983-84

Institution	Employed in job requiring certificate		Employed in related job: no certificate		Employed in unrelated job		Graduate school, armed services, unemployed		Don't Know		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Ky University	52	96.3	0	0.0	0	0.0	0	0.0	2	3.7	54	100.0
Ky State University												
Morehead State U	[a]											
Murray State U	45	100.0	0	0.0	0	0.0	0	0.0	0	0.0	45	100.0
Northern Ky University	26	100.0	0	0.0	0	0.0	0	0.0	0	0.0	26	100.0
University of Ky	50	83.3	0	0.0	3	5.0	0	0.0	7	11.7	60	100.0
University of Louisville	13	92.9	1	7.1	0	0.0	0	0.0	0	0.0	14	100.0
Western Ky University	[a]											
Total	186	93.5	1	0.5	3	1.5	0	0.0	9	4.5	199	100.0

[a] Data not provided

While level III teachers were progressing in ranks, their percentage of Rank I teachers was not as high as some of the other vocational areas. This would appear to indicate a potential need for appropriate courses planned to meet the needs of these teachers.

These educational needs are presently supported by teacher education programs in seven of the eight state universities. During the past five years numbers of graduates from the undergraduate certification programs fluctuated but with no uniform decline, while faculty numbers declined.

Special Vocational Education

Special Vocational Teachers

The typical special vocational teacher in Kentucky in 1984-85 was about 41 years old with 12.5 years of teaching experience. She or he probably taught in a reimbursed program, holding Rank II certification with a master's degree or above that had been earned at one of the state universities.

Numbers of Teachers

In 1984-85 special vocational teachers in reimbursed and state-operated programs numbered 197 according to PSD data, regional directors, the VTDF survey, and program consultants. There were also twelve liason program people employed in eight regions. (Liason personnel are teachers in state schools and area centers who work only with handicapped students and are trained, certified, and funded out of special education. For the purposes of this report, they have not been included in any of the data, due to their non-vocational funding and certification.) The regional distribution of all of these teachers is presented in Table 151.

Data on the numbers of state-employed teachers in each region teaching under specific O.E.-designated program titles are presented in Table 152. Because of programming limitations, if a teacher listed two O.E. codes only the first was recorded. The largest proportion of state-employed teachers reported being in learning centers and/or working with remedial instruction.

Age and Experience

In 1984-85 the typical special vocational teacher was 41.3 years old and had taught for 12.5 years. The mean ages for each region are shown in Table 153. Average years of teaching experience for each region are shown similarly in Table 154.

Examination of Tables 153 and 154 may give some indication of potential retirements statewide and in particular regions. For example, four teachers were 61 years of age or older, with four more who were 56 to 60 years of age. At the same time, while only one teacher had completed 30 or more years of teaching, 6 teachers had 25-29 years of experience and were, therefore, approaching the 30-years milestone.

Teacher Turnover

When the 1984-85 school year began, only three special vocational teachers reported that they were in their first year of

Table 151

Numbers of Special Vocational Teachers in Kentucky, 1984-85
By Type of Teacher and Vocational Region

Type of Teacher	Vocational Regions														Total
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
Reimbursed	6	5	5	7	6	43	11	5	4	13	0	7	3	18	133
State-Employed	7	3	3	2	4	9	10	3	0	2	4	8	3	6	64
Total	13	8	8	9	10	52	21	8	4	15	4	15	6	24	197
Liaison Program Personnel[a]	1	2	1	2	0	1	0	0	0	0	0	1	2	2	12

[a] Teachers in state schools and area centers who work only with handicapped students and are trained, certified, and funded out of special education.

Table 152

Numbers of State-Employed Special Vocational Teachers Under Each Title, for Each Vocational Region

Program Titles and O.E. Codes	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Special Programs 98.0000	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3
Developmental Occupational Programs, Level I 98.0102	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Remedial Instruction and/or Learning Center 98.0312 98.0303 98.0314 98.0324 98.0322	1	1	2	1	2	3	5	2	0	1	2	3	0	6	29
Guidance 98.0503	1	0	0	0	0	0	0	1	0	0	1	1	2	0	6
Vocational Improvement Program Supportive Services 99.0603 99.0607	5	0	0	0	0	2	3	0	0	1	1	0	1	0	13
Unknown	0	2	0	1	2	4	0	0	0	0	0	2	0	0	11
Total	7	3	3	2	4	9	10	[illegible]	0	2	4	8	3	6	64

Table 153

Ages of 1984-85 Special Vocational Teachers

Age Group	Vocational Regions 1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total n	%
21-25	0	1	0	1	0	0	2	0	0	0	1	0	0	0	5	2.5
26-30	1	2	2	1	0	1	2	0	2	1	0	2	0	1	15	7.6
31-35	0	1	1	0	2	4	7	1	0	2	1	3	2	3	27	13.7
36-40	6	2	1	3	4	10	3	4	0	6	1	3	1	9	53	26.9
41-45	3	0	2	2	1	13	3	1	0	1	0	2	0	7	35	17.8
46-50	1	0	1	1	0	10	2	1	1	0	0	1	0	1	19	9.7
51-55	2	0	1	0	0	5	2	0	1	4	0	0	2	2	19	9.7
56-60	0	0	0	0	0	3	0	0	0	0	0	0	1	0	4	2.0
61-65	0	0	0	0	1	1	0	0	0	1	0	0	0	0	3	1.5
65+	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.5
Unknown	0	2	0	1	2	4	0	1	0	0	1	4	0	1	16	8.1
Total	13	8	8	9	10	52	21	8	4	15	4	15	6	24	197	100.0
Mean Age	41.0	30.7	38.8	37.9	39.0	43.5	36.1	39.0	39.0	42.4	31.0	36.0	44.7	38.9	41.3	

Table 154

Years of Experience of 1984-85 Special Vocational Teachers

Years of Experience	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	3	1.5
1-4	1	1	1	1	0	0	8	1	1	2	1	1	0	2	20	10.2
5-9	0	2	1	0	5	3	6	2	1	3	1	4	2	5	35	17.8
10-14	7	2	3	3	3	14	1	2	0	5	1	3	3	12	59	29.9
15-19	3	0	3	2	0	20	5	3	0	1	1	3	0	1	42	21.3
20-24	1	0	0	1	0	8	1	0	1	3	0	1	1	3	20	10.2
25-29	1	0	0	0	0	3	0	0	1	1	0	0	0	0	6	3.0
30-34	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.5
35+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Unknown	0	2	0	1	2	4	0	0	0	0	0	2	0	0	11	5.6
Total	13	8	8	9	10	52	21	8	4	15	4	15	6	24	197	100.0
Mean Years of Experience	14.3	5.8	12.1	12.0	8.4	15.7	8.9	10.5	14.0	13.0	9.0	12.6	12.4	11.3	12.5	

teaching. The new hire rate (the percentage of teachers who were in their first year of teaching) was 1.5% (Table 154.) New hire data over the past five years for reimbursed teachers is presented in Table 155 (comparable data was not available for state-employed teachers.) It appears that the turnover or new hire rate for special vocational teachers has been rather low, especially over the past four years.

Rank

While rank information was available for all teachers for 1984-85, comparable information for any of the years before that was available only for reimbursed teachers. As indicated in Table 156, the proportions of Rank I and Rank II special vocational teachers increased over the past five years, while the proportion of Rank III teachers decreased in that time period. In 1984-85, 34% of the special vocational teachers held Rank I certification, and 44.2% held Rank II certification. Totaled together, over three-fourths of the special vocational teachers held Rank II certificates or above.

Regional rank distribution is presented in Table 157. This information may be useful to universities when planning educational programs in their areas.

Highest or Most Recent Degree or Certificate Completed

State-employed teachers were also asked to indicate the highest degree or certificate they had completed. Results reported in Table 158 (along with degree goals) indicate that only one teacher reported holding a certificate lower than a bachelor's degree. Well over half of the state-employed teachers (56.2%) reported holding a master's degree or above.

Information about the highest degree held was not directly available from reimbursed teachers. However, the ranking system for these teachers is such that a Rank III implies a bachelor's degree, a Rank II implies a master's degree, and a Rank I implies a master's degree-plus-30-hours. Therefore, rank information in Table 156 and Table 157 can be assumed to also reflect the highest degrees held by special vocational teachers across the state. Given that assumption, over 78% of Kentucky special vocational teachers held master's degrees or above.

Both the PSD form and the VTDF survey provided information about the institution from which teachers received their highest or most recent degree or certificate. As can be calculated from Table 159, 72.1% of these teachers received the highest or most recent degree from one of the state institutions. In-state independent schools or out-of-state schools served 20.9% of the group. Western Kentucky University, with 19.8%, and Eastern Kentucky University, with 18.8%, awarded highest or most recent degrees for the largest groups of teachers.

Table 155

New Hire Rates for Kentucky Reimbursed Special Vocational Teachers, 1980-1985

Year	Total Teachers	0 Years Experience	
		n	% or New Hire Rate
1980-81	142	5	3.5
1981-82	126	2	1.6
1982-83	127	1	0.8
1983-84	129	1	0.8
1984-85	133	2	1.5

Table 156

Ranks and Percentages of Kentucky Reimbursed Special Vocational Teachers, 1980-85

Year	Rank I		Rank II		Rank III		Total
	n	%	n	%	n	%	
1980-81	42	29.6	65	45.8	35	24.7	142
1981-82	32	25.4	69	54.8	25	19.8	126
1982-83	31	24.4	72	56.7	24	18.9	127
1983-84	42	32.6	67	51.9	20	15.5	129
1984-85	45	33.8	68	51.1	20	15.0	133

Table 157

Ranks of Kentucky Special Vocational Teachers, 1984-85, for all Regions

Rank	Vocational Regions														Statewide Totals
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	
I															
Teachers	4	2	4	3	4	20	5	2	1	6	2	5	1	8	67
%	30.8	25.0	50.0	33.3	40.0	38.5	23.8	25.0	25.0	40.0	50.0	33.3	16.7	33.3	34.0
II															
Teachers	6	2	4	3	3	24	9	5	0	7	0	5	5	14	87
%	46.2	25.0	50.0	33.3	30.0	46.2	42.9	62.5	0.0	46.7	0.0	33.3	83.3	58.3	44.2
III															
Teachers	3	2	0	2	1	4	7	1	3	2	1	2	0	2	30
%	23.1	25.0	0.0	22.2	10.0	7.7	33.3	12.5	75.0	13.3	25.0	13.4	0.0	8.3	15.2
Unknown															
Teachers	0	2	0	1	2	4	0	0	0	0	1	3	0	0	13
%	0.0	25.0	0.0	11.1	20.0	7.7	0.0	0.0	0.0	0.0	25.0	20.0	0.0	0.0	6.0
Total															
Teachers	13	8	8	9	10	52	21	8	4	15	4	15	6	24	197

Table 158

Degree Goals of 1984-85 State-Employed Special Vocational Teachers, Distributed in Relation to Highest Degree Already Completed

Highest Degree/ Certificate Presently Held	Degree Goal									Total	
	24 Hr.	64 Hr.	Bachelor's	5th Yr.	Master's	Master's +30	Doctor-ate	Other	No Resp/ Unknown	n	%
64 Hr.		1	0	0	0	0	0	0	0	1	1.5
Bachelor's		0	1	0	5	4	0	1	3	14	21.9
Master's		0	0	0	3	9	2	0	4	18	28.1
Master's +30		0	0	0	0	6	5	2	5	18	28.1
Other		0	0	0	0	0	0	1	0	1	1.6
No Response/ Unknown		0	0	0	1	0	0	0	11	12	18.8
Total		1	1	0	9	19	7	4	23	64	100.0

Data in Table 159 also provided information regarding the regions served by each university. Out of 142 teachers responding to this item in full, 110 were employed in either the home region of the university where they earned their highest or most recent degree, or in one of the bordering regions. At the same time, when compared to other vocational areas, an unusually high number of 32 teachers (22.5%) were employed farther afield than those bordering regions. (21 of these 32 teachers who worked farther away from their degree-granting university were in Region 6 and attended either Murray State University or Western Kntucky University.) Because a high proportion of the highest or most recent degrees were graduate degrees, it is assumed that many teachers earned these degrees while also teaching full time. It is to be expected that the large portion of graduates from any university, then, were also likely to work near by. Therefore, the high proportion (compared to other vocational areas in this report) of people attending universities at some distance is of interest.

Present Enrollment in Higher Education

Analysis of VTDF survey data provided considerable further information on state-employed teachers. Since the state-employed special vocational teachers constituted a fairly small group, appropriate data will be summarized here but not presented in detailed tables.

The state-employed teachers were asked to indicate any present enrollment in some university program. Of the 53 teachers included in the survey, 37 gave no response, indicating presumably that they were not enrolled in any program at the time of the survey. Seven reported being enrolled in a master's degree, four were enrolled in a master's-plus-30 program, two in a doctorate program, and three indicated "Other."

The teachers also were asked to indicate where they were enrolled. Three each indicated enrollment at Eastern Kentucky University, Morehead Stae University, and Murray State University. Two each indicated enrollment at Northern Kentucky Uniersity, the University of Kentucky, the University of Louisville, and in-state independent schools.

Degree Goals

State-employed teachers were asked to indicate their degree goals. Responses regarding degree goals in relation to the highest degree presently held, or "how far one has yet to go," are reflected in Table 158.

Of the teachers giving complete responses, it would appear that many planned further education. Of the 36 teachers who indicated

Table 159

Institutions Where Kentucky Special Vocational Teachers Received Their Highest or Most Recently Completed Degree or Certificate, 1984-85

Institution	Vocational Regions														Total	
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	n	%
Eastern Kentucky University	0	0	1	0	0	3	3	0	0	4	1	8	4	13	37	18.8
Kentucky State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Morehead State University	0	0	0	0	0	0	1	6	2	5	2	0	0	1	17	8.6
Murray State Universitt	10	2	1	0	0	6	1	0	0	0	0	0	0	0	20	10.2
Northern Ky University	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	2.0
University of Kentucky	0	0	0	0	1	2	2	2	0	2	0	0	0	8	17	8.6
University of Louisville	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8	4.1
Western Ky University	1	2	6	6	7	15	1	0	0	0	0	0	1	0	39	19.8
Other Schools In-State	2	1	0	0	0	7	0	0	1	2	0	5	0	1	19	9.6
Other Schools Out-of-State	0	1	0	2	0	5	9	0	1	2	1	0	0	1	22	11.2
Unknown	0	2	0	1	2	6	0	[illegible]	0	0	0	2	1	0	14	7.1
Total	13	8	8	9	10	52	21	3	4	15	4	15	6	24	197	100.0

desiring one of the regular university degrees or programs, 25 cited a degree or program higher than the one they already held. Nine out of ten holding a bachelor's degree cited a higher goal. Eleven out of fourteen with master's degrees cited a higher goal, and five teachers with master's-plus-30-hours indicated that they wanted a doctorate.

Institution Awarding First Degree

In an effort to examine one aspect of the teacher supply, state-employed teachers were asked to indicate where they got their first degree. The largest single group (13 teachers) earned their first degree from some in-state school other than one of the state universities. The next largest group (eight) earned their first degree outside of Kentucky. Regarding the state universities, six each first graduated from Eastern Kentucky University and Morehead State University. Five each got their first degree from Murray State University and Western Kentucky University. The rest were distributed between Northern Kentucky University, the University of Kentucky, and the University of Louisville. It appears that the independent colleges and out of state schools play a larger than usual part in the early preparation of these teachers.

Summary

During 1984-85 there were at least 197 special vocational teachers in Kentucky. The typical teacher was 41.3 years old and had taught for 12.5 years. A new hire rate of 1.5% indicated that few replacements were likely to be needed in present circumstances. Age and experience figures appeared to substantiate this in general, while presenting evidence that a few retirements might be expected.

Over three-fourths of the special vocational teachers held master's degrees or above, or expressed another way, held Rank II or Rank I certificates.

While state universities provided the highest or most recent degree for a large majority (72.1%), in-state independent schools or out-of-state schools also provided the same degree for a considerable number (20.9%.) Special vocational teachers were somewhat unique in this. They were also somewhat unique in the high proportion (22.5%) who were employed at a considerable distance from where they received that degree.

A higher than usual proportion of first degrees were also earned at Kentucky independent colleges and at out-of-state schools. It appears that while Kentucky universities played a large role in the education of these teachers, other colleges and universities also played a significant role.

While the teacher education of these special vocational teachers is of vital importance, it does not presently fall under the jurisdiction of departments of vocational education in the state's universities. Therefore, no data on special vocational teacher education was compiled or presented in this report.

General Vocational Education

All of the undergraduate students in vocational teacher education fit into one of the service area categories. Many of the graduate students also fit into a service area. However, in some of the universities there were graduate students who were enrolled in a general vocational program. Some students also were in a service area program, but because of administrative structure or other factors were not listed as such. In order to represent these and other students who were very much a part of vocational education, data were gathered that included all students not otherwise reported by service areas.

Most but not all of the universities also had faculty members who were not assigned to a specific service area, but who worked with students in all areas as an instructor or as an administrator. Again, these faculty members were those who were not reported by service area heads.

Eastern Kentucky University and Kentucky State University indicated that they had no general vocational education faculty or students. All faculty and administrators who were involved in vocational teacher education were assigned to and reported by a service area. All students also were enrolled in some service area, with no general vocational education degrees being offered. However, all the other state universities designated some students and/or faculty members to be classed as general vocational education. These are reported here.

Faculty

In 1984-85 there were a total of nine general vocational education faculty members in six Kentucky state universities, with an FTE of 6.35 (Table 160.) In most cases the individual designated as vocational teacher education department head, coordinator, or administrator was listed as general vocational education faculty. Some listed themselves as full time. Others listed themselves as part time or less than 1 FTE in general vocational education. These individuals were shared by other departments or subject areas. Some who were considered to be vocational teacher education coordinators reported they were fully assigned to specific areas or with too few general vocational education duties to be recorded.

As indicated in Table 161, the total number of general vocational education faculty has declined by only one over the past five years, with the loss of one at the University of Kentucky.

Enrollment and Output

A total of 200 graduate students were reported as having been enrolled in some course during 1984-85 (Table 162.) Seventy-six, or

Table 160

General Vocational Education Faculty Degrees: FTE, and K-12 Experience; 1984-85

Institution	Highest Degree			n	FTE	Number with K-12 Experience
	BA/BS	MA/MS	Doctorate			
Eastern Kentucky University	0	0	0	0	0	0
Kentucky State University	0	0	0	0	0	0
Morehead State University	0	0	1	1	1.0	a
Murray State University	0	0	1	1	0.25	1
Northern Kentucky University	0	0	1	1	0.25	1
University of Kentucky	0	0	2	2	2.0	2
University of Louisville	0	0	2	2	2.0	2
Western Kentucky University	0	0	2	2	0.85	2
Total	0	0	9	9	6.35	8

[a] Data not available

Table 161

General Vocational Education Faculty and Faculty Time Equivalents (FTEs) 1979-1984

Institution	1979-80		1980-81		1981-82		1982-83		1983-84	
	n	FTE	n	FTE	n	FTE	n	FTE	n	FTE
Eastern Kentucky University	0	0	0	0	0	0	0	0	0	0
Kentucky State University	0	0	0	0	0	0	0	0	0	0
Morehead State University	1	1	1	1	1	1	1	1	1	1
Murray State University	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25
Northern Kentucky University	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25
University of Kentucky	3	3.0	2	2.0	2	2.0	2	2.0	3	2.10
University of Louisville	2	2.0	2	2.0	2	2.0	2	2.0	2	2.0
Western Kentucky University	2	1.5	3	2.5	2	1.5	2	1.5	2	1.5
Total	10	8.0	10	8.0	9	7.0	9	7.0	10	7.10

Table 162

General Vocational Education Students Enrolled in Some Post-Baccalaureate Course in 1984-85

Institution	Level											
	5th Year		M.A./M.S.		Rank I		Doctorate		Other		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Kentucky State University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Morehead State University	15	100.0	30	39.5	35	76.1	0	0.0	0	0.0	80	40.0
Murray State University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Northern Kentucky University	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
University of Kentucky	0	0.0	8	10.5	4	8.7	35	92.1	25	100.0	72	36.0
University of Louisville	0	0.0	33	43.4	5	10.9	3	77.9	0	0.0	41	20.5
Western Kentucky University	0	0.0	5	6.6	2	4.3	0	0.0	0	0.0	7	3.5
Total	15	100.0	76	100.0	46	100.0	38	100.0	25	100.0	200	100.0

almost half, were listed as master's degree students. Forty-six of them were listed as Rank I students. Almost half, or 48.2% were reported by Morehead University.

When teacher educators were asked to report the number of general vocational education graduate students "in the pipeline" of some program (Table 163,) whether or not they had actually taken some course during the past year, the total of 130 students was somewhat smaller than the numbers of general students they reported as enrolled in some course (Table 162.)

Teacher educators then reported the number of graduate completions in general vocational education programs. Only the University of Kentucky, the University of Louisville, and Western Kentucky University reported completions. A total of 188 students completed fifth year/master's degrees; 15 completed Rank I/Specialist programs; and 15 completed doctorates. Examination of Table 164 reveals a general decline in numbers of completions, primarily in fifth year/master's degree completions which went from 50 in 1979-80 to 17 in 1983-84. Numbers of students completing the other degrees remained small and, while uneven, were about the same at the end of the time period as at the beginning.

Other Program Areas

Throughout the state there are at any time a number of training classes being taught under the program title of Public Service. These include classes on such topics as Fire Specialist, Vehicle Rescue, Emergency Medical Care, Standard First Aid, and so on.

While these classes are usually taught by part-time people who would not have been picked up by the VTDF survey, they are an important part of the vocational program in Kentucky. Working to coordinate these courses and their instructors in each region are public service coordinators. Out of the total group of 14 public service coordinators, only seven were picked up in data collection. At the same time, state department program consultants work closely with this group and know them well. Therefore, it was decided to not present any analysis of data on this group beyond a recognition of their population.

Another group of 14 state-employed teachers was classed as "Miscellaneous." These teachers responded to the VTDF survey but did not list an O.E. code or could not be classified into one of the established groups. They listed teaching areas such as related math, computer, coop coordinator, employability skills, and miscellaneous guidance. Their diversity seemed to preclude inclusion of the data that was collected.

Table 163

Students Considered to be Enrolled in a General Vocational Education Post-Bacclaaureate Program

Institution	Program											
	5th Year		M.A./M.S.		Rank I		Specialist		Doctorate		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Eastern Kentucky University*												
Kentucky State University*												
Morehead State University	10	90.9	8	12.9	9	39.1	0	0.0	0	0.0	27	20.8
Murray State University*												
Northern Kentucky University	1	9.1	9	14.5	0	0.0	0	0.0	0	0.0	10	7.7
University of Kentucky	0	0.0	2	3.2	6	26.1	1	100.0	30	90.9	39	30.0
University of Louisville	0	0.0	38	61.3	7	30.4	0	0.0	3	9.1	48	36.9
Western Kentucky University	0	0.0	5	8.1	1	4.4	0	0.0	0	0.0	6	4.6
Total	11	100.0	62	100.0	23	100.0	1	100.0	33	100.0	130	100.0

*Not applicable

Table 164

Graduate School Completions in General Vocational Education

	Year																			
	1979-80			1980-81			1981-82			1982-83			1983-84			Subtotal			Total	
Institution	5th/Masters	R.I/Specialist	Doctorate	5th/Masters	R.I/Specialist	Doctorate	5th/Masters	R.I/Specialist	Doctorate	5th/Masters	R.I/Specialist	Doctorate	5th/Masters	R.I/Specialist	Doctorate	5th/Masters	R.I/Specialist	Doctorate	n	%
Eastern Kentucky University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kentucky State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morehead State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Murray State University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Kentucky University	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
University of Kentucky	35	0	4	20	1	2	29	1	4	19	0	1	2	3	4	105	5	15	125	57.3
University of Louisville	7	0	0	9	0	0	10	0	0	12	0	0	10	0	0	48	0	0	48	22.0
Western Kentucky University	8	3	0	9	2	0	7	3	0	6	1	0	5	1	0	35	10	0	45	20.7
	50	3	4	38	3	2	46	4	4	37	1	1	17	4	4	188	15	15	218	100.0

A larger segment of vocational teachers is the group who taught practical arts in 1984-85. This group of at least 106 teachers taught a wide variety of courses, mostly in junior high programs. Funded under vocational education, many of the teachers were certified in one of the vocational fields. However, many others were certified in some other area, and the count of practical arts teachers taken from PSD data (Table 165) does not indicate how many were vocationally certified and how many were certified otherwise. Further, many teachers who taught practical arts did so only part time. If practical arts was a minority of their teaching load, they may have been listed in some other area. As a result, the "official" count of practical arts teachers from the PSD data probably does not represent the true total of practical arts teachers. And it does not measurably contribute to an accurate tabulation of the pool of vocational teachers in the state or in individual programs. Therefore, data analysis in this area has been omitted.

As of the end of the 1984-85 school year, the practical arts program was being discontinued. According to state department personnel, several factors affect the impact this development will have on the supply of vocatonal teachers.

Many practical arts teachers teach only an hour or two of practical arts and can be expected to be absorbed into the school system as the program ends. In some schools an unfunded version of practical arts may continue, thus occupying the teachers. Some of the practical arts teachers are certified in areas other than vocational education (a science instructor teaching the transportation unit, for example.) While affecting the local school system, the loss of that practical arts unit would not directly impinge on the vocational teacher pool.

On the other hand, in the case of industrial arts, program consultants report that at least 65 industrial arts teachers are teaching a combination of four industrial arts clusters in practical arts, or in other words, mostly practical arts. While cessation of the practical arts program may release some of these teachers into the job market, program consultants also feel that some of these industrial practical arts programs may shift back to regular junior high industrial arts programs, thus keeping the teachers. Other service areas may find the same situation existing for some of their teachers. It does seem that the effects on the teacher pool of ending the practical arts program will be determined in large part by what individual schools do in terms of teacher assigments and programs.

Table 165

Numbers of Practical Arts Teachers in Kentucky by Vocational Region, 1984-85

	Vocational Regions														
	1	2	3	4	5	6	7	9	10	11	12	13	14	15	Total
Teachers	3	1	4	11	4	25	12	4	3	9	2	9	3	16	106

CHAPTER 4

OPINIONS OF KENTUCKY VOCATIONAL EDUCATORS

As a part of the project, a number of opinion questions were asked of different groups of individuals. Department heads or coordinators (or someone acting in their stead for the completion of the questionnaire) were interviewed personally on topics relating to the future of vocational education in Kentucky. National leaders in vocational teacher education were interviewed by mail on topics relating to the overall outlook for vocational education. Regional directors were asked about enrollment and hiring for their particular regions as well as about long range prospects in their region. Teachers as well as regional directors were asked to suggest useful or needed courses to be offered by the universities. And teachers were asked about problems they had encountered while trying to earn degrees and certificates.

A compilation of the material gathered as a result of these questions is presented in this section. In some cases, responses will be summarized or tabulated. In other cases, responses will be presented as given.

Strengths and Weaknesses of Kentucky Vocational Education

Vocational department heads or coordinators in the state universities were asked to think about vocational teacher education in Kentucky and to discuss what they saw as its major strengths and weaknesses. Overall, they tended to see a strong vocational program. One administrator said that Kentucky was always looking for better ways to serve people in vocational education, especially in personnel development and student development. He felt that Kentucky generally keeps up with technology.

Another administrator said that he sees positive attitudes in the vocational graduates who are going out to teach. He said they have a "gleam in the eye! Ready to go!" He felt that the strength of vocational education lies out in the field where there are people who do a good job of teaching and pushing vocational education.

One administrator lauded the concept of the field-based teacher educator who works with industrial education teachers and their individual programs.

A major strength cited by another administrator was the agreement and understanding among universities as to the overall purpose and delivery of teacher education, including the accepting of credits.

Another positive point was seen in the post-secondary program, especially as it provides training for students who didn't take high school vocational education, who didn't finish college, and who then come back needing a job and job training.

Finally, while one administrator specifically cited some of his programs as being "as good as you find anywhere," many of the administrators expressed a good deal of pride in their programs. While they cited various problems, it was obvious that they felt good about many things both statewide and in their own institutions.

These administrators were also asked to discuss or cite weaknesses they saw in Kentucky's vocational education system. A variety of responses were given and are summarized here.

It was suggested that in the past there had been strong coordination between the state department and teachers in regard to research and development. Reductions in facilities led to less committment regarding a high level of research. It was suggested that both increased money and a committment by the state Superintendent of Education are needed if this situation is to change.

Several administrators expressed concern with low enrollments in teacher education programs. They suggested that institutions could not continue to defend or operate programs with low enrollments. Another administrator cited the concern that more teachers were being trained than were being placed. The concern with low enrollments was mentioned more often than any other specific concern. At the same time, administrators did not dwell on it in any detail.

A need was also expressed for more coordination between various areas of vocational education. A need was seen for more cooperation between vo-tech schools and the community colleges so students could move from program to program and utilize the various facilities. As an example of such cooperation, it was pointed out that Eastern Kentucky University gives up to 18 hours of credit to students from certain vocational schools in certain programs, after they take an advanced course at Eastern. While it was felt that this practice needs further study and possibly some changes, it was cited as an improved use of resources.

One administrator expressed an interest in seeing vocational education shift to local control. He felt there is a need to look at the impact of that possible change and to ask if there is a better way of delivering secondary vocational education.

Better communication was encouraged for several levels. One administrator was concerned with communication as it affects the state hiring system involving personnel, certification, the Office of Vocational Education, universities, and regional administration. He felt that the lack of communication allowed people of poor competency to slip through and be hired. He would eliminate a level, e.g. personnel, and also suggested that standardized testing may eventually alleviate this problem. He suggested communicating entry standards to people who do hiring, and cleaning up the laxity of certification as granted on an emergency basis.

Another point of confusion mentioned by an administrator (and by many teachers) was the issue of trying to correlate preservice and inservice teachers in relation to pay and ranking.

Suggestions for Change in Vocational Education

Besides discussing strengths and weaknesses of vocational education, some of Kentucky's vocational educators were asked what changes they might suggest for vocational education. Teacher educators were specifically to suggest changes, and regional directors were asked how teacher education could be organized to do the best job.

Comments of Vocational Teacher Educators

Vocational teacher educators seemed to feel good about many aspects of vocational education. At the same time, it was suggested that in an effort to improve and go for "excellence," the programs should be reviewed annually.

It was suggested that new specialized teachers and better training were needed for teaching the disadvantaged and handicapped. One administrator suggested that Level III teachers ought to have bachelor's degrees before teaching.

Changes involving community colleges and vocational schools were suggested by at least two people. One administrator suggested that the only way the community college system and the vocational school system can be effective is to operate as a single entity with transferable programs. This would help the image of programs and would enhance "less than baccalaureate degrees." He would put the community college and the vocational school in a given geographic area under one head. He thinks such a system will come about eventually, and should produce very employable graduates.

Another expression of the community college situation was the recommendation to make community colleges into "true community colleges" by putting them under local boards of education and then put all vocational programs there. Illinois, Florida, California, and Oregon were cited as examples of states where all post-secondary programs are in the community colleges.

Comments of Regional Directors

Regional directors, who oversee state-operated programs, were asked: "How do you feel teacher education should be organized to do the best job for your teachers? Be as specific as you can." Responses focused on a number of concerns, and are included here, generally as given.

Am satisfied with the current organization.

Evaluation in class instruction and shop organization (work stations).

Teacher education should be permitted and required to provide courses for certification without regard to the number of students enrolled in a class.

Teachers should be allowed to attend any university and have credits transferred to the parent university.

Efforts between teacher education institutions may need to be coordinated to insure offerings are available when needed.

Consolidate funding and allocate appropriate colleges or universities (West, Central, East) for teacher education. Emphasis should be field based activities.

It is my opinion that the current structure of teacher education is spread too thin. All universities are trying to operate all programs. I feel we should have perhaps three (3) universities offering these preparation programs. One in the eastern area, one in the central area and one in the western area. This arrangement would provide a geographical balance. A mobile staff from three areas could serve the regions to the degree possible.

A teacher educator should work with an entire region and not split as it is now. This would allow closer coordination with regional in-service activities.

We have in the past been served well by Western Kentucky University. However, if by some reason of necessity that these programs have to be offered at a central state location, it would be highly beneficial to maintain the close working relationship as has been in the past to achieve the best possible education for our teachers.

I sometimes feel that teacher education suffers from "ivory tower syndrome" -- withdrawn, inaccessible to the real world of the classroom. (Not applicable to vocational education only, all teacher education). There should be more ongoing interaction between teacher education and the actual classroom experiences, to better incorporate, revitalize, and update teacher education.

Teacher education should be organized so the same 2 or 3 professors do not teach every required vocational course. The reason for this is that teachers need to be exposed to different techniques.

All classes need not be offered for college credit.

Classes need to be offered through university teacher education coordinators for vocational education.

Have clear guidelines of course requirements.

Prohibit "to be announced" classes.

On-going annual-biannual seminar groups for clusters of teachers (5-8 in group) to share experience.

Organized around teacher needs as perceived by them and expectations perceived by supervisors.

Scheduled around work schedules of staff.

Individualized to meet specific needs for certification.

Assign one or more teachers to teach but follow up in the shops and classrooms for at least one additional semester for implementation to observe if the teachers are practicing what was taught. May use video tape to reveal to all the feed back that is needed. Involve the principal so the "team approach" will be a part of the overall operation.

The closer the better to the teacher. To my people, preferably at NKU.

The Future of Kentucky Vocational Education

Department heads or coordinators were asked, during their interviews, to give their opinions regarding what future they saw for vocational education and vocational teacher education in Kentucky and nationwide. Regional directors were asked more specifically and in writing about the future of Kentucky vocational education in terms of teacher shortages and potential enrollment changes in their regions.

Opinions of Teacher Educators

An organizational change suggested by one teacher education administrator was to have vocational education "release industrial arts" and put it in general education. He felt that industrial arts has kept up with technology, but has suffered neglect and is dying in the schools.

Among department heads and coordinators there seemed to be a general feeling that vocational education is at the bottom of a cycle and about to come up again. They projected that they more need for teachers in the next five to ten years. Some indicated a need was already present for more teachers in some of the technical areas.

Administrators recognized that the academic excellence movement appears to be causing fewer students to enroll in vocational courses at present. This, combined with accountablility efforts and tighter budgets, may cause some good but small programs to close. Vocational education courses may be dropped in order to hire another English teacher. It was suggested that students really are looking for job training (as well as needing general education,) and something must be done to keep vocational education viable.

While most see a struggle to maintain vocational enrollments, in Jefferson State Vo-Tech School there are waiting lists for some programs. In an effort to alleviate the problem, starting January, 1985, some of the adults who could not get into already full vo-tech programs were being allowed to enter the high school vocational programs.

One administrator suggested that jobs of the future don't really call for a baccalaureate degree. Vocational education is needed up to the associate degree level. Preparation for work will get more technical at the high school and associate degree level than it used to be. Vocational education can handle this change, although we may have to redefine vocational education.

Throughout the project development, regional directors and teacher educators expressed concern about the continued existence of all the vocational teacher education programs. Vocational teacher education administrators were especially concerned with the issue, and almost all addressed it in one way or another. Some were specifically asked to comment regarding the question: How do we all survive?".

Some felt that not all will survive. Some areas will die of their own volition. Several suggested various versions of combining areas into a general vocational program, especially at the master's level. Team teaching as a means to effectively use resources was suggested. Reduction of administration was another option.

One administrator commented that if one believes in the concept of a regional university serving a region, then the decision to survive will be based on the needs of the region. He commented, too, that programs would have to phase out if the demand got too small.

One administrator addressed the problem in terms of attracting and turning out better teachers. He suggested that teachers' salaries will have to be raised. He also expressed concern regarding the effectiveness of the new teacher education standards (e.g., testing) in TEP screening. He felt that teacher candidates should be carefully screened for TEP admittance and should then be able to assume that unless they flunk they would make it as teachers.

Regional Unfilled Teacher Positions

To some extent, the need for more vocational teachers can be illustrated in terms of positions that go unfilled for want of a qualified instructor. Regional directors were asked to list any positions in their region that were unfilled during 1983-84 and 1984-85.

No unfilled positions were listed for 1983-84.

Four positions were unfilled in 1984-85:

Region 3;	Health (Operating Room Technician)
Region 5;	Plumbing
	Ag Mechanics
Region 14;	Computer Programmer

Projected Future Hiring Difficulty

Regional directors were also asked: "Do you foresee future difficulty in hiring qualified teachers in specific areas?" Responses indicated that they did see difficulty hiring in the areas listed below:

Region 1

Health Occupations
High Technology Areas of Trade and Industries

Region 2

Oil field Technology
Electrical
Machine Shop
Biomedical Equipment Technician
Respiratory Therapy
Medical Lab
Air Conditioning*

*An air conditioning instructor with a diversified background in industrial experience is hard to find.

Region 5

Electronics
Diesel Mechanics
Machine Shop
Plumbing

Region 7

Health
Industrial Education
Technical

Region 10

All T & I Programs

Region 12

Automobile Mechanics
Mine Maintenance Technology
Heavy Equipment Maintenance and Repair
Electronics
Heavy Equipment Operating Engineer

Region 14

Computer Programming
Computer Repairs

Regional Director Comments

Many regional directors also made comments. Most of these are included here, generally verbatim.

The new requirements (testing) for certification may pose a problem in drawing persons with good occupational experiences. Time will tell.

High demand occupational training programs in which salaries paid by Vocatonal Education are too low to be attractive to well qualified prospective teachers.

Employing teachers in the future will depend on raises provided by the general assembly.

(The hiring process is) a time consuming complicated selection and employment process that discourages applicants.

Recruitment, due to the mandated testing program, will be much more difficult, I anticipate. Costs and lost pay will probably be the major issues with salary a secondary factor.

(No problems hiring) if the Department of Education and Department of Personnel will process the personnel action.

Our current salary schedule is not competitive with business and industry for highly qualified personnel.

We have had difficulty in hiring a surgical technician instructor. However, I feel that - in most cases - we will be able to hire the instructors we need.

Occasionally we do experience some difficulty in the health programs in such fields as X-Ray Technologist and Respiratory Therapy.

Regional Short- and Long-Range Enrollment Predictions

Each regional director was asked to speculate on any significant enrollment changes in vocational education for 1985 and for 1990. Since many vocational education staffing decisions are made region by region, rather than statewide, these comments are included here for each region and are quoted directly from the questionnaires. Study of these comments will reveal some regional trends as well as statewide trends which can have an effect on vocational education and teacher education as a whole.

Region 1

1985: Secondary Vocational Education Enrollments will tend to decline because of new academic requirements for graduation. Post Secondary enrollments should increase. Short Term Adult Training and Re-training should increase.

1990: Population should increase in the area because of opportunities that Tom-Big-Bee Waterway will provide heavy industry. Coal, electricity, and transportation should lead to industry locating here.

Region 2

1985: Webster County AVEC will be opening a new Oil Field Technology Program. The Health School may add a paramedic program and they also hope to expand short-term courses in the health field on-site and in-school.

Because of high school graduation requirements scheduling becomes a problem and enrollment suffers.

Retraining will be provided for the Arvin Plant as well as Grinnell located in Princeton. The training for Arvin will involve approximately 400 to 425 individuals. Because of the expansion in these two plants, it is expected that the adult population will increase.

Enrollment is expected to decrease in the mining programs if the depressed conditions in the mining industry continue.

1990: An expansion will be needed at the Eddyville Vocational Education Center to accommodate the increased population at the West Kentucky Farm Center. This will include the construction of a new building to house the programs.

Because of the high school graduation requirements, it is expected that the secondary enrollment will be lower. The adult enrollment is expected to increase because of retraining for industry.

A decrease in the mining programs will be likely under the present conditions.

Region 3

1985: There could be an overall decrease in secondary enrollment because of the restrictions resulting from recent state board actions. To meet the new graduation requirements, secondary students will have some difficulty in scheduling vocational classes.

The fluctuations of the economy also affects our enrollment, with post-secondary enrollment usually increasing during poor economic times.

1990: There probably will be a movement toward high-tech programs during the coming years.

Region 4

1985: Our Area Centers may possible experience around a 5% decrease in enrollment due to the new regulation established by the last legislature.

We anticipate an increase in the short-term enrollments due to changing technologies and expansions of industry.

1990: Indications from Business and Industry are that the need for short-term high technology training programs will be on the increase. Advanced and/or modified upgrade type programs will replace some of our standard basic skill training programs

Region 5

1985: High school enrollment has been on the decline and is expected to continue to decline in 1985. At the present time, Hardin County is showing a slight growth. Breckinridge, Grayson, Larue, Meade and Nelson Counties have dropped and now seem to have leveled off with about the same enrollment for 1985 as 1984. Marion County and Washington County will lose secondary enrollment for 1985. Because of a building expansion at Elizabethtown, we will increase the number of adult students served.

1990: Too many unknowns!! For example - will the current emphasis on the academics continue? What new employment will be attracted to this state between now and 1990? Will vocational education become an alternative academic program? Can vocational classes be used to meet partial credit for science and math requirements? Will the 3 hour block be taken into consideration when scheduling to meet increased high school graduation requirements?

Region 6

1985: No significant enrollment changes foreseen.

1990: Close a few programs and implement a few programs that are more technical--computer--and service oriented.

Region 7

1985: I anticipate secondary level enrollments to decline for at least one more year--attribute this to the increase of State Board of Education graduation credits and the pre-college curriculum requirements. Marketing and information by Vocational Education personnel should offset this in subsequent years (I hope!).

1990: Continued and intensified curriculum change towrd high tech and computer-assisted-everything (CAE). Probable deemphasis on "lower level" trades in terms of the number of programs available in the region (ex. welding, building trades - residential, auto body, health services [exploratory type,] and cosmetology).

Region 9

1985: Increase of approximately 60 secondary slots and 100 adult long term slots in all programs at Rowan SVTS. This facility was moved into in December, 1984.

1990: Yes, in industrial education and health related, as the needs for change in the above. Also, business and office, as it relates to computer application.

Region 10

1985: No significant enrollment changes foreseen.

1990: There should be a normal increase due to population growth, and demands for trained people in high technology industries.

Region 11

1985: There are economic changes in Region Eleven that will effect enrollment in our vocational technical programs. Currently, retail outlets are being constructed that will provide jobs in that area. Also, there are predictions fo a very large mall in Pikeville that we will need to train potential employees for.

1990: There are predictions that the population will grow in Region Eleven from 5% to 20% by 1990. If this population increase occurs, there will be a strong demand for vocational-technical programs.

Region 12

1985: No significant change.

1990: Retail Sales - The development of shopping centers in Perry, Breathitt, Letcher and Knott Counties.

Mining is moving into more sophisticated equipment which will require emphasis with more technical training and a broader base in the academics.

Region 13

1985: Due to new industry moving into the Corbin area, railroad factory, a need for welders and machinists.

1990: More upgrade for post-secondary and adult training.

Region 14

1985: Secondary enrollments region wide may be decreasing due to new requirements. Welding and Auto Body don't meet the 60% basic education requirement.

1990: Flexibility in scheduling of secondary students is a must or we will see an overall decline in secondary enrollment.

Post secondary possibly may decline as student benefits programs decrease.

Many programs will require very expensive equipment if we are to remain current.

Region 15

1985: Fiscal cuts at Federal level will affect all areas of education. In general, I expect most programs to remain at status quo, with increases in short-term adult training and re-training needs. At secondary level, new pre-college emphasis may limit numbers of students tracking in vocational education.

1990: Secondary level should increase, as a result of present trend of increase at elementary level. As postsecondary technical training advances training/teaching components to correlate more directly with industry's requirements (and this is happening). There will be an increase at this level also.

Special Concerns of Teachers and Regional Directors

Through the various surveys, state-employed teachers and regional directors were given an opportunity to express themselves regarding certain aspects of the teacher education process. Regional directors were asked where they thought inservice classes should be held. Teachers and regional directors suggested classes they felt were needed. And teachers commented — sometimes very strongly — on problems they had encountered while trying to take courses or complete a degree.

Suggestions for Class Location

Regional directors were asked "Where should classes be offered to best serve your teachers?" Most regional directors felt that some classes, at least, should be offered in the regions or as near to work centers as possible. They recognized, however, the problem of getting high enough enrollment with classes offered locally. They also recognized a need to offer some courses in a university setting. As one director commented: "It is convenient, of course, to offer courses in the regions. However, a significant number of courses should be offered on campus, which should serve to develop professionalism among our non-degreed teachers and other teachers who need to further their professional development."

Other opinions regarding the location of classes included the following comments:

"To be determined by course objectives. Field based teacher education courses require a school setting if they are to accomplish their purpose. Other classes may be carried out more successfully on a university campus."

"No particular opinion - probably a mixture of College Based courses coupled with Field Based follow-up and problem solving experiences."

"Varies - they should take some within the Region but some at college campus. Many classes in the past have no real practical value except credit and certification. The CBVE individual approach lack quality in my opinion."

"This is not a major issue. However, if close to their home or work sites, would be helpful in efficient utilization of their time."

"Teaching is very hard work, if one does a good job. To the degree possible, college courses should be taken to the regions. Due to numbers required this may not be feasible in all cases."

Suggested Classes

Regional directors and teachers were asked about classes needed or desired. Regional directors' responses are reported here by region, with comments being quoted directly. Responses of teachers were sorted by program area and by region. However, because the list of teacher responses was so lengthy, it has been placed on file with the Office of Vocational Education and with the researchers. Universities will also be provided with the lists of course suggestions from regions in their area.

A strong call from state-employed teachers emerged for courses related to particular technical areas--update or upgrading courses and workshops. Some teachers requested education courses. A few declared their intention to avoid education courses. Many simply stated, "whatever is required..." for a B.S. or an M.A. or M.A.-plus-30-hours or doctorate. Some specified courses required for particular degrees, such as math, English, and so on.

While teachers called for technical or subject matter courses, regional directors spoke out for classes relating to teaching skills and human relations--class management, curriculum and instruction, communications, and so on.

Teacher educators may want to consider these suggestions as they make future plans for course offerings and program design.

Regional Director Responses

Region 1.

Technical up-date classes (Special Problems)
More emphasis on Professionalism and Team Approach
New directions indicate vocational teachers need to reenforce teaching of basics in applied situations. Our teachers may need help in this regard.

Region 2.

Professional education courses
Computer education
Time management
Class management and organization
Curriculum Development
General education courses for 64 hours certification and B.S.

Short workshops for in depth teaching techniques

Region 3.

Teacher education classes. The teachers who come to us from industry need training in how to teach (methods of teaching), how to handle students, professionalism. They need the training provided to those who receive teacher training at our universities.

Region 4.

A class in communication skills is most certainly needed in any vocational teacher training program.
A class in human relations and classroom discipline would also be beneficial.

Region 5.

Laboratory and shop management - Help with supervision of a large area where several activities are taking place at the same time.
Human relations - Help in developing skills to prevent normal conflicts from becoming crisis problems.

Region 6.

How to deal with individual instruction
Changing technology

Region 7.

Foundations, methods, audio visuals, course and task analysis and course design, communications (written and spoken,) technical math, teaching/learning theory, needs of special learners (handicapped and disadvantaged), shop organization, safety, philosophy and purposes of vocational education to name a few.

Region 9.

Sociology, as related to socio-economic stratification. (Help understand cultural problems related to personal problems.)

Academics related to service area; their application to program by the student (learner.)

Region 10.

Classes to complete degree programs.

Specific upgrade classes in their specialized area.

Region 11.

A continuation of formal education is essential in my opinion; however, I feel a required component in industrial school, staff exchange type programs should be required of all teachers for continued certificaion.

Region 12.

Philosophy of Vocational Education
Methods of Instruction.
Course analysis and organization.
Communications Skills.
Technical updating - Factory School Approach - Staff/Industry Exchange.

Region 13.

Computer training, teaching methods, record keeping

Region 14.

Classroom management - practical approach for Industrial Education
Psychology (Educational)
Theories of Learning
Use of Training Aides

Region 15.

Most teachers need to learn how and what to teach--and practice at doing both of these. Developing their individual budgets (equipment needs, etc.) would be helpful to them. Classroom management is a major problem for the majority at least the first couple of years. Could at some point be on site in their classroom to demonstrate the "how and whats."

Problems Reported by State-Employed Teachers

State-employed teachers were asked: "What problems have you encountered while trying to take courses or complete a degree?" Their responses were then categorized and tabulated. A summary of the tabulations is reported here in Table 166. Numbers of responses do not add up to numbers of teachers as some individuals cited more than one problem, each of which was categorized. Actual responses, sorted by program area are on file with the Office of Vocational Education and the researchers.

Overall, many teachers reported no problems in one of two ways. Some specifically stated "None" when asked about problems. A larger group simply left the question blank. While no response or "None" reflected in some cases that the individual had not been taking courses, in many cases it reflected teachers who were "satisfied customers."

The problem most frequently cited overall was "Time." Some responses simply listed "Time;" others specified "time away from families," "time away from curriculum planning," and so on. For a large group, time problems were a major concern when earning degrees or certificates.

Scheduling problems were second in frequency. These included the specific problem of classes being scheduled only at times when teachers could not attend (daytimes, especially.) This was cited frequently, especially in regard to the difficulty of getting general studies courses for bachelors' degrees and in getting technical courses. Some of the responses also seemed to indicate a general problem of scheduling classes in with school and home responsibilities.

Related to scheduling was the problem of insufficient time for summer courses for teachers on an 11 1/2 month work year. Several specifically mentioned inability to find needed courses of two weeks length at the right time. A few mentioned the difficulty of taking such courses when conferences and workshops are scheduled during the two weeks off. Some of the longest comments related to this issue.

Problems involving availability of needed or useful courses were partially related to the overall issue of scheduling. Some teachers simply said courses were not available when (or where) they needed them. Others cited a general lack of courses available in their particular subject area. Technical or subject-matter courses were frequently identified as needed.

Money appeared to be an important issue to teachers, as it was the third most frequently cited issue. Some responded simply "cost" or "money." Others specified "tuition costs" or "costs of courses."

Table 166

Summary of Problems Cited by State-Employed Vocational Teachers

Categories of Responses	Agriculture	Business & Office	Distributive Education	Health & Personal Services	Home Economics	Industrial Education Level III	Technical	Special Vocational Education	Miscellaneous	Total
Space left blank	4	37	3	37	4	193	5	11	4	298
"None"	3	44	0	20	5	120	3	11	6	212
Time	7	20	3	32	5	95	4	7	3	176
Cost of courses and lack of state assistance	1	8	2	32	3	71	1	5	4	127
Travel time; location of classes	3	14	1	26	1	55	0	3	0	103
Scheduling problems	8	10	3	37	8	77	1	5	0	149
Availability of needed or useful courses	2	10	2	13	5	43	2	2	0	79
Insufficient time for summer courses on 11 1/2 month year	2	12	0	6	2	10	0	3	1	36
Scheduling of workshops and summer conferences at same time as courses	0	2	0	0	0	1	0	0	0	3
Transfer and acceptance of credits	0	1	1	6	0	12	0	1	0	21
Irrelevant or repetitious courses	0	2	0	5	1	16	2	2	0	28
Quality of teacher educators and advising	1	2	0	4	0	7	1	0	1	16
Communication difficulties with university and/or certification staff	0	0	0	0	0	13	0	0	0	13

Still others felt the state should be paying for the courses, especially when the courses were required for teachers to maintain a teaching certificate.

Location of classes and travel time or distance were problems for many teachers. Some stated a need for more courses in their geographic area. Apparently for some, distance to class prevented them from taking courses either during the year or at all. In other cases, they reported considerable unhappiness over the distance, but apparently took the courses regardless. Some felt the amount of time spent traveling was time taken from families and/or class preparation.

The education received came under some criticism. Some said that technical or subject-matter courses were more relevant than the required education courses. In some cases, repetition from course to course was seen as a problem.

The quality of the instruction and advising also received some criticism. A few teachers felt they had received unsatisfactory advising. Communication difficulties between teachers and professors and/or university offices and lack of information were mentioned. Some felt certification changes had not been handled promptly either at the university or at the state department.

Related to the general issue of communication was the problem of getting credits transferred and accepted. Several teachers specifically mentioned problems they were still having stemming from the assignment of the state universities to specific geographic areas of responsibility. They felt they were not receiving appropriate consideration by their "new" university in matters of transfer of credits or courses offered, and so on.

CHAPTER 5

NATIONAL VOCATIONAL TEACHER EDUCATION SURVEY

Vocational teacher education is organized in various patterns in the universities across the nation. As in Kentucky, some vocational teacher education programs are divided among subject matter departments and colleges while others are consolidated in a department of vocational education. Representatives from those programs that are consolidated under one department head have formed the University Council for Vocational Education. The council consists of representatives from 16 universities:

Auburn University
Colorado State University
University of Connecticut
University of Georgia
University of Illinois
University of Kentucky
University of Maryland
University of Minnesota
University of Missouri
North Carolina State University
Ohio State University
Oklahoma State University
Rutgers--the State University of New Jersey
Southern Illinois University
University of Tennessee
Virginia Polytechnic Institute and State University

In an effort to explore some aspects of the current status of vocational teacher education, a questionnaire was designed and sent to each of the current Council representatives (except the University of Kentucky.) Representatives from The Pennsylvania State University and Utah State University were also contacted.

In all, nineteen teacher educators were contacted, and fifteen responded. Their responses have been compiled and are presented in this section of the report.

Outstanding Programs

In an effort to seek out programs which might be considered outstanding or state-of-the-art, the teacher educators were asked to think about programs in their institution and in other institutions across their state or region. Then they were asked to describe any that stood out as being well above average, or outstanding in some particular way. While many of the educators cited programs which they felt were generally strong in teaching, research and service, some others cited special characteristics which were not true of every program. Some of these are reported here.

Ohio State University cited their Industrial Technology Education , Agricultural Education, and Comprehensive Vocational Education programs as being especially distinctive due to faculty notoriety, faculty number and comprehensive nature.

General vocational education and the graduate program at the University of Connecticut were described as combining Vocational Education and Teacher Education (all areas) with Adult and Human Resources Education.

At the University of Minnesota the combination of the undergraduate and graduate instructional program combined with research and service efforts make these programs strong (Agriculture, Business and Marketing, Home Economics and Industrial.)

"Oklahoma State University operates a teacher survival program which is designed to assist first-year T&I teachers. This program is run in conjunction with the August conference which is required of all vocational teachers in the state of Oklahoma. Of the five days, new T&I teachers are expected to participate with the T&I teacher education staff at Oklahoma State University in a program which addresses fundamentals of teaching, classroom control and discipline, organization and management of learning facilities, and details related to meeting State requirements for programs. While this program is woefully inadequate in a sense that three days is not adequate, we are attempting to move toward a month long and hopefully a two-month long program which would expand on major subjects and serve as a major pre-service experience for those teachers who are brand new to teaching having just left an industry or trade position.

"New T&I teachers are required to complete 16 semester hours of credit during the first three years of teaching experience. Oklahoma State University utilizes a talk-back TV arrangement that provides for video presentation of selected campus-based classes with an audio feedback system. The talk-back TV facilities are dispersed around the state and within reasonable driving distances of teachers. The T&I staff offers annually three separate programs via talk-back TV which provide for a total of 11 semester credit hours. This makes it possible for teachers to spend a part of one summer on campus to complete their 16 hour teacher certification requirements. The talk-back TV program, while not new in Oklahoma, is a reasonably innovative delivery system for providing instruction to teachers in remote areas and in small groups which would not be feasible to be served by on-site instruction."

Health Occupations Education at the University of Georgia was cited by someone from another state for its good reputation.

The University of Maryland cited their Trades & Industrial certification program of 18 credits of "approved courses identified by the State Department of Education. The objective is to get the tradesperson certified as quickly and effectively as possible. This can be accomplished in a 12 month period while the teacher is experiencing his/her first year of teaching." Ten of the credits can be taken during one summer.

Virginia Polytechnic Institute and State University responded with some indices of quality with respect to their own programs. They cited entrance procedures, placing student teachers across the state in the best possible locations and visiting them at least three and sometimes six times, and the incorporation of recent technological developments in the under-graduate curriculum (especially microcomputers.)

Southern Illinois recognizes work experience for credit in a program they believe is distinctive across Illinois.

Faculty at Pennsylvania State University cited three individual programs. Home Economics Education at Penn State attracts students from across the country with its excellent reputation. There is active participation in professional organizations and professional writing.

Agricultural Education at Penn State was cited for its excellent faculty, problem solving, and a program to assure occupational competence of teachers.

Business Education at Shippensburg State University (Pennsylvania) was cited for its excellent contact with business and teachers in the schools.

At Utah State University one- and two-year Ag Mechanization programs complement the teacher training program in Ag Education. The Ag Mechanization BS and MS courses are located in the Ag Education Department in the College of Agriculture.

Projected Enrollment Changes

The teacher educators were asked to comment on any significant enrollment changes in the future in their state or nationwide. Overall, they expressed views of general stability in enrollments despite some decline at present. In general, they seemed to feel that vocational enrollments were about to bottom out and would shortly be rising.

Because individual comments dealt with various aspects of vocational education, and because they expressed a nationwide cross-section of opinion, they are included here as taken from the questionnaires.

Ohio State University

"Recent declines at undergraduate level. Graduate enrollment is stable. May increase in 1985-86. Not familiar with national situation."

University of Connecticut

"Has gone to predominately females in grad program. Undergrad dropouts have diminished, but expect a slower comeback, already starting. Vocational Education having some appeal to nontraditional populations--Health, Business, Industry and Government."

University of Minnesota

"State-wide--no significant declines--expect leveling off and slight increase in 4-5 years--based on population changes. Nationwide--don't know."

University of Missouri

"Vocational Education enrollments are falling off in most of the Area Vocational Centers because sending districts cannot afford to send more students. In many instances the actual dollar support remains stable but increases in AVC tuition means that fewer students can be sent from the home district."

Rutgers

"We (the faculty) feel that our enrollments have bottomed out and will be stable (although those programs that have been dropped are dead.) We see big changes coming for the nation--we have had to face many of those changes. Undergrad vocational education (occ. based) is now poorly delivered in New Jersey so politicians wish to dump it but that is a bigger mess, so the politicians have a problem."

Oklahoma State University

"Based on recent college entrance requirements that have been established by the State's Regents for Higher Education, one might anticipate a reduction in enrollments in vocational education at the secondary level. At the present time there appears to be a major groundswell to cause the Regents to change those requirements which would be more conducive to students enrolling in vocational programs. At the same time, it appears that there is going to be a significant change in enrollments due to more adults participating in vocational education on either a part- or full-time basis. I think much of our future in vocational education is going to be related to providing update and retraining for adults. At the same time I would not want to predict that lessening of enrollments at the secondary level when you think of those enrollments as a percentage of the total students in secondary schools. It is my personal belief that in spite of smaller numbers entering the secondary schools, that area voc-tech schools and other vocational programs will continue to maintain enrollments at nearly present levels when considering only secondary schools."

University of Colorado

"There may be some declines in enrollment at the secondary level due to increased high school graduation requirements. I do not anticipate any post-secondary enrollment decline."

North Carolina State University

"Little change, overall. Some program areas will grow; others decline (in cycles). Changes in high school graduation requirements, though, could lead to a slight decrease."

University of Maryland

"Statewide: Perhaps a slight decline. Reason: Due to nature of new high school diploma requirements. Nationwide: Very little, if any."

Virginia Polytechnic Institute

"There are not going to be any increases in enrollment in vocational education courses in high school programs throughout the state. The community colleges are also in a down turn at the present time. There will be declining enrollments, in my opinion, as a result of increased high school graduation standards that emphasize academic courses. We are in the process of tracking this in a longitudinal basis and will have empirical data in another year to ascertain the situation. I believe the same thing is true nationwide and other states are already suffering declines as a result of the increase in high school graduation standards."

Auburn

"Maybe, Increase in general academic subjects for graduation."

Southern Illinois University

"I do not see any significant enrollment changes in vocational education in the State of Illinois or nationwide. In spite of all the emphasis on education reform, I believe that the need for vocational eduation is well recognized and students will demand it. There might be a slight decrease within the next couple of years; however, after that, the enrollment pattern will increase again."

Pennsylvania State University

"Secondary enrollments are declining. A 10 percent decline in a secondary school results in a 30 percent decline in vo tech enrollment from that school. State wide vo-tech enrollment is down from 17.5 to 16.5 percent of potential enrollers at secondary level."

Utah State University

"No, not statewide nor nationwide until funding increases."

One other teacher educator reported that "post secondary vocational teachers should increase. Secondary will decline slightly. If proposed state legislation passes I think we will see an increase in teacher education enrollments."

Effects of Budget Cuts on Vocational Teacher Education

A major concern of vocational teacher educators has been the management of resources or, more specifically, the maintenance of quality programs with less money. The survey of Council members asked how they had been affected by budget cuts and how they coped with this problem. Eight of the group reported faculty cuts in their programs. In some cases they specified that these were vacant positions that were eliminated. Four universities reported program cuts or programs being combined and/or consolidated, resulting in some cutbacks. Three programs reported that they had "held their own" in some manner. And the University of Minnesota reported that they had increased by two tenure track positions over the past ten years. Rather than eliminating programs, they added new program areas in special needs learners, vocational education administration, extension education and training and development.

Some of the teacher educators cited the comprehensive nature of their programs as the reason for their survival. In some cases they went to a more comprehensive program in order to better use their available resources. In other cases, their programs were already comprehensive in some degree. For example: "Due to comprehensive program nature, faculty losses have not created serious problems." "No departments have been combined however we are developing 'core' courses at the undergraduate level to streamline our programs." "No positions were lost. The program tended to hold its own because of the flexibility and versatility of the staff."

Other problems detailed by loss of funds included loss of graduate and secretarial support and reduced travel budgets, with the result that professional staff time was taken up in paperwork and administrative tasks with reduced effectiveness in research and service, and reduced activities on regional and national levels.

Unique Funding Methods

Given the difficult financial situation in which many universities have found themselves, it was postulated that some programs of vocational teacher education might have developed new ways of funding their programs. Council members, then, were asked if they were aware of any unique methods of funding vocational teacher education, either in their own state or in other states. Seven respondents indicated that they were not aware of any new ways of funding. The others described various funding methods of interest either at their schools or elsewhere. Some of these will be included here.

University of Connecticut

"1. Seeking voluntary gifts, 2. Alumni contributions can be directed to programs—all vocational graduates have been contacted and urged to contribute to a department fund, 3. Collaborative programs with businesses, industry and schools being developed."

University of Minnesota

"We have a mechanism called Special Services which is a long term grant from the Department of Education. It provides for instruction off campus, at special times and for small groups. About forty courses were taught last year. Staffing is done by regular faculty (inload or overload) as well as adjunct faculty. Tuition is charged for courses and is used to multiply the scope of work under the grant. Course needs assessment, development and evaluation can also be done under the grant."

University of Missouri

"Many states are going out with RFP's and contracting with universities or other agencies to provide specific preservice and inservice for vocational teachers. Others are giving sole source grants to provide special workshops and the like that they feel are needed in their state."

Colorado State University

"We are proposing that a Center for Professional Development and Program Improvement be funded in our department. The State Board for Occupational Education would use federal funds to support the Center."

Virginia Polytechnic Institute

"During the past three years, all of the universities in the Commonwealth of Virginia (9) have worked with the State Department of Education in changing the funding concept of vocational teacher education. Prior to this year, nine institutions were reimbursed at a given percentage of faculty salaries and in turn these faculty would provide services to the State Department of Education. The new concept requires services to be delivered as opposed to reimbursement of faculty salary."

Pennsylvania State University

"In 1976 four teacher education (vocational professional develop centers) were funded on an annual project proposal basis. Prior to this - from 1923 on, Penn State had received base funding for research, development, and curriculum materials. The Center concept eliminated many of the smaller colleges from funding."

Utah State University

"We were supported by the State Dept. for in-service training for teachers (no more). As a result, we are expanding research efforts in our Ag Mechanization programs for survival. We have sold staff time to cover the loss of salaries."

Vocational Teacher Education as a Part of the State Program

A part of the concern with funding centers on the issue of the relationship of vocational teacher education to the the state program of vocational education, especially in regard to the amount of money that can be expected to support the responsibilities of that arrangement. The Council members were asked: Is vocational teacher education in your state considered to be a part of the state program of vocational education, sharing in resources and work load, or is it considered an independent curriculum program area, such as math or English teacher education might be? Please describe the present situation in your state. Comment, if you care to, on the effectiveness of the situation and your view of the probably future in regard to that arrangement."

Responses to this question were about equally divided between those who claimed to be independent of the state department, those who cited arrangements involving considerable sharing of resources, and those who cited some state department aid, generally for varying projects and special services.

Several described independent situations in which their program of vocational teacher education was considered as an independent curriculum program in their university. Some of these teacher educators cited strong informal coordination and communication with their state department. One teacher educator said that their particular system where funds are allocated by the Legislature to the University System Board of Governors, then to the various institutions in the System "...appears to be equally as effective as the old State Board reimbursement system. Actually provides better relationships - more freedom - and better opportunities to bid on research and curriculum projects."

While some respondents did not so state, it is possible that those who considered themselves to be independent had access to state money for special projects.

A number of teacher educators described their departments as part of the state program of vocational education. They said they shared in resources, planning, and work load. At the same time, some cited having to also share in the reduction of resources.

Other teacher educators seemed to consider themselves slightly more removed from full state department participation, but having the advantages of contracts with the state department for varying services, inluding those which permit hiring an enlarged staff to serve teachers.

Certification for Non-Degree Trade and Industry Teachers

Trade and Industry teachers make up a large proportion of state-employed vocational teachers. Because they enter the teaching profession without basic teaching credentials, their certification programs must be planned to fit around full time teaching schedules that, in many cases in Kentucky, extend to 11 or 11 1/2 months of the year. In an effort to discover if other states had found a creative solution to the organizational problems inherent in this situation, teacher educators were asked: "How is your state organized to provide educaton leading to certification for non-degree T&I teachers?"

The answer given by one state was frank: Not very well. Other states reported a number of practices. Some cited procedures similar to those used in Kentucky wherein one or more universities coordinated course work offered. Some more specific comments by the teacher educators are included here.

University of Connecticut

"This is done exclusively through Central Connecticut State College. Prospective teahers take a minimum of two courses prior to employment with teachers paid by state dept."

University of Minnesota

"....The Special Services mechanism ..." which provides for small group instruction off campus and at special times "is used to provide the needed instruction to these teachers."

University of Missouri

"We provide (with state department support) a new teacher institute each year and then offer all of the certification courses off campus. Other institutions also offer these courses on extension, but not to the extent that we do."

Oklahoma State University

"....Our teacher education program is designed in such a way as to encourage individuals to complete their Baccalaureate degree once they have achieved T&I certification."

Colorado State University

"Nondegree teachers must have five years of work experience and a high school diploma. They complete a one week orientation program (should be two or three weeks) and are required to complete 10 semester credits before receiving a regular credential. We have a good Itinerant Teacher Training Program that assists teachers on-site."

University of Maryland

They provide a program to get the tradesperson certified in a 12 month period while the teacher is in his/her first year of teachaing. Ten of the credits can be taken during one summer. A 34 credit hour Advanced Professional Certificate Program (APC) is also available for the advanced certificate.

Virginia Polytechnic Institute

"The State Department of Education provides funds for services to deliver off-campus courses to certify non-degree trade and industrial education teachers as well as health occupations teachers. We have established a competency based program to deliver this service and have approximately four FTE who deliver these courses in off-campus locations throughout the state."

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APPENDICES

Appendix A. Letters to Regional Directors

UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY 40506-0017

COLLEGE OF EDUCATION
VOCATIONAL EDUCATION
43 DICKEY HALL

February 28, 1985

Dear

I enjoyed meeting with you in Frankfort at your January Regional Director's meeting. As we told you then, staff members in the University of Kentucky's Department of Vocational Education are conducting a project entitled "Vocational Teacher Preparation and Programs: Analysis and Needs." Commissioned and funded by the Kentucky Department of Education, project activities include collection of data about preservice and post-baccalaureate teacher education programs as well as data on vocational teachers and vocational enrollments, especially in regard to supply and demand.

Therefore, we have designed two questionnaires: one to be completed by you, the regional director, and one to be completed by each full-time teacher in your jurisdication. Information provided by these forms will fill in some information gaps about Kentucky vocational teachers as well as give feedback about vocational teacher education.

Data will be summarized and reported by regions, program areas, and possibly types of schools. None will be summarized or reported for individual schools or teachers.

In carrying out the survey, please do the following:

1. Check to see that there is a packet for each of your schools. Also check to see that each packet contains at least enough forms for each full-time teacher. I have provided the forms based on a state department count plus a few extra. Please feel free to xerox extras as needed. Each packet should also contain one or two copies of the "Information Sheet: Program Titles and O.E. Codes" and a sheet of instructions. Notice that survey forms in each packet are already coded by region and by a school code.

2. Distribute surveys to each school and make suitable arrangements for their return to you. Please explain the purpose of the project to your principals and get their cooperation. As Audrey Carr pointed out, the project results are important to vocational education. We need 100% returns! I'm counting on you to follow up all your schools and get all the surveys back!

3. Fill out your own survey form labeled" "Regional Director's Questionnaire."

4. Return your survey and all the teacher surveys in the enclosed large return envelope. Please keep the forms from each school together in separate packets (use the envelopes, rubber bands, or even staple them if there are only a few.)

I would like to have the forms back as soon as possible. However, I also know you may want to distribute them when you meet with your principals, and that may not be in the next week or so. Therefore, I am asking that you try to return them by March 20, 1985. If you can't return them by then, please call me at (606) 257-5691 and we'll work it out.

If you have any questions as you work with the surveys, please call me at the above number. I am most likely to be available from 9AM until about 2PM (E.S.T.) each day.

We are most grateful for the efforts of you, your principals, your teachers, and your secretaries in this project! Thank you!

Sincerely yours,

Charlotte Tulloch
Project Coordinator

Appendix B. Regional Director's Questionnaire

Region ____________________

REGIONAL DIRECTOR'S QUESTIONNAIRE
KENTUCKY VOCATIONAL TEACHER EDUCATION PROJECT

1. Record the total number of full-time teachers in your region in each program area for the years listed. Out of all those teachers in each program area, how many were "newly hired" that year? Record the number of those "new hires" in the space provided for each program area and year.

	AG		B&O		DE		HPSO		HE		PS		IE		SPV		OTHER	
Year	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires	Total Teachers	New Hires
1980-81																		
1981-82																		
1982-83																		
1983-84																		
1984-85																		

2. How many teaching positions in your region (and in what program areas) went unfilled because no qualified teacher was available:

In 1983-84? ____________ ____________
(program area) (unfilled positions)
____________ ____________
____________ ____________
____________ ____________
____________ ____________

In 1984-85? ____________ ____________
____________ ____________
____________ ____________
____________ ____________
____________ ____________

3. Do you foresee future difficulty in hiring qualified teachers in specific areas? ______ If so, what program areas?

Comments:

4. Do you foresee any significant enrollment changes in vocational education in your region for 1985? If so, please explain. Specify program areas and/or communities affected. Describe the basis for your prediction. Possibilities might include direct knowledge of money being cut or new programs being added. Or, perhaps an industry is building a plant in your region, and you expect to meet some of their training needs.

5. Do you foresee any significant enrollment changes in vocational education in your region for 1990? If so, please explain, specifying program areas and/or schools or communities affected. Describe the basis for your prediction as in the previous question.

6. From your perspective as a Regional Director, what types of classes do you feel are needed by your teachers?

7. Where should classes be offered to best serve your teachers?

8. How do you feel teacher education should be organized to do the best job for your teachers? Be as specific as you can.

Thank you!

Appendix C. Directions for Principals and Teachers Regarding the VTD Form

INSTRUCTIONS

INSTRUCTIONS FOR PRINCIPALS:

Enclosed is your set of Vocational Teacher Data Forms (the yellow sheets). Please read the following instructions carefully before giving out the forms.

The yellow sheets are to be given to all of your full-time vocational teachers. If you are not sure whether certain people should fill out the form, give them the form and write an explanation of the situation on the top. We can then decide about including them when we receive the forms.

A few copies of an Information Sheet containing program codes, program titles, and O.E. Codes are enclosed. Please have them available for teachers to consult if they do not know their O.E. Code.

The following Teacher instructions for completing the survey are included for your use in several possible ways. The instructions may be read verbatim or explained to teachers in a group setting. They may also be copied and distributed with the survey in their school mail as a memo from you to teachers.

Whatever the method, please see that all full-time teachers (including absentees) fully complete and return their form to you. Then return the entire set of completed forms to your regional director by whatever date and method he or she has requested.

If you have any questions, please contact your regional director or call Dr. Charlotte Tulloch at the University of Kentucky (606) 257-5691.

INSTRUCTIONS FOR TEACHERS:

You are being asked to complete a short Vocational Teacher Data Form. This form is part of a larger data collection process going on in Kentucky for a vocational teacher education study commissioned by the Kentucky Office of Vocational Education. Teacher education programs are being analyzed and data are being gathered on numbers and education of vocational teachers. Findings will be reported by regions, program areas, types of schools, and so on, but not by individuals or by individual schools. We hope that this study will have positive benefits for Kentucky vocational education,

You may use either pen or pencil in filling out the form. Write on the left margin or on the back if you wish to explain an answer.

The O.E. Code in Item A is the most important part of your response to that item. An information sheet of program areas, titles and codes has been sent to your principal. Ask to see it if you are not sure of your code.

For J, list an institution only if you have completed a degree or certificate. If you are still working on your first degree/certificate, leave Item J blank.

For K, record the awarding institution for your most recently completed degree/certificate, even if it is the same institution (and degree) as the answer for Item J. Leave K blank if you are still working on your first degree.

After completing the form, return it to your principal.

Thank you for your help.

INFORMATION SHEET
PROGRAM TITLES AND O.E. CODES

AGRICULTURE

Agriculture Production	01.0100
Agricultural Supplies/Services	01.0200
Agricultural Mechanics	01.0300
Horticulture	01.0500
Agricultural Resources	01.0600
Forestry	01.0700
AgriBusiness I & II	01.0800

DISTRIBUTIVE EDUCATION

Advertising Services	04.0100
Fashion Merchandising	04.0201
Finance and Credit	04.0400
Floristry	04.0500
Food Marketing	04.0600
Food Services	04.0700
General Merchandising	04.0800
Hotel/Motel	04.1100
Industrial Marketing	04.1200
Insurance	04.1300
Personal Services	04.1500
Petroleum	04.1600
Real Estate	04.1700
Recreation and Tourism	04.1800
Warehouse and Transportation	04.1900
Bus Services Marketing	04.2000
General Marketing	04.2200
Retailing	04.2201
Comm. Educ., Intrad. to Bus., Bus. Mgt., and Bus. Economics	04.3000

HEALTH AND PERSONAL SERVICES

Dental Assisting	07.0101
Medical Lab Technician	07.0203
Registered Nurse	07.0301
Practical Nursing	07.0302
Nursing Assistant	07.0303
Surgical Technology	07.0305
Radiologic Technology	07.0501
Respiratory Therapy	07.0903
Medical Assisting	07.0904
Pharmacy Supply Clerk	07.0912
Barbering	07.2601
Cosmetology	07.2602
First Aid	07.2841
CPR	07.2844
Medical Secretary	07.9800
Health Services	07.9901
Medical Transcriptionist	07.9905
Ward Clerk	07.9906
EMT	07.9907
Related	07.9908
Medications Administration	07.9909
Neighborhood Health Wkr	07.9910

HOME ECONOMICS
—SPECIAL INTERESTS COURSES

Comprehensive Home Ec	09.0101
Child Care & Guidance	09.0102
Clothing Construction	09.0103
Consumer Education	09.0104
Personal, Marriage, Fam. Rel.	09.0106
Food Preparation & Mgmt.	09.0107
Foods for Special Occasions	09.0108
Housing & Home Furnishings	09.0109
Parenthood Education	09.0110
Adult Living	09.0112
Family Living	09.0113
Cons. & Fam Life Skills	09.0199

HOME ECONOMICS CONTINUED
—OCCUPATIONAL PREP PROGRAMS—

Child Care Services	09.0201
Clothing Services	09.0202
Commercial Foods	09.0203
Home Furnishings	09.0204
Home/Community Services	09.0205

B&O Education

Accounting/Management	14.0100
Data Processing	14.0200
Clerical	14.0300
Exploratory B & O	14.0350
Word Processing	14.0400
Secretarial	14.0700

TECHNICAL EDUCATION

Occup Safety & Health Intern	16.0099
Civil & Highway Technology	16.0106
Electrical Engineering Tech	16.0107
Electronics Technology	16.0108
Manufacturing Technology	16.0111
Instrumentation	16.0112
Mechanical Engineering Tech	16.0113
Mining Technology	16.0199
Welding Technology	16.0610
Drafting Technology	16.0620
Machine Tool Technology	16.0630

INDUSTRIAL EDUCATION

Air Conditioning	17.0100
Appliance Repair	17.0200
Auto Body Repair	17.0301
Auto Mechanics	17.0302
Fork Life Mechanics	17.0303
Truck Mechanics	17.0304
Auto Parts	17.0399
Aircraft Mechanics	17.0401
Blueprint Reading	17.0500
Office Machine Repair	17.0600
Commercial Art	17.0700
Radio & TV Production	17.0900
Building Maintenance	17.1000
Carpentry	17.1001
Heavy Equipment Operator	17.1003
Masonry	17.1004
Interior Finishing	17.1005
Plumbing	17.1007
Heavy Equipment Repair	17.1013
Mine Maintenance Technology	17.1093
Industrial Machine Maintenance	17.1099
Diesel Mechanics	17.1200
Drafting	17.1300
Electricity	17.1401
Electronics	17.1501
Radio & Television Repair	17.1503
Dry Cleaning	17.1601
Foremanship	17.1700
Graphic Arts	17.1900
Machine Shop	17.2302
Sheet Metal	17.2305
Welding	17.2306
Tool & Die Making	17.2307
Meat Cutting	17.2903
Small Engine Repair	17.3100
Commercial Sewing	17.3300
Tailoring	17.3302
Upholstery	17.3500
Cabinet Maker	17.3601

INDUSTRIAL EDUCATION CONTINUED

General Miner	17.9902
Technical Related	17.9908
Mine Equipment Operator	17.9910
Industrial Worker	17.9920
MSHA Instruction Coordinator	17.9950
Pre-Employ Underground Mining	17.9951
Retraining Underground Mining	17.9952
Pre-Employment Surface Mining	17.9953
Retraining Surface Mining	17.9954
Electrical Qualification MSHA	17.9955
Electrical Requalification MSHA	17.9956
Emergency Medical Training MSHA	17.9907
Oil Field Technician	17.0305

ACADEMIC/VOCATIONAL

JAVA	93.1001

INDUSTRIAL EDUCATION LEVEL I & II

Ind Educ Level I	94.1000
Ind Educ Level II	94.0000

PRACTICAL ARTS

Practical Arts Career Exploration	95.0000

PUBLIC SERVICE

Unit 1	96.2801
Unit 2	96.2802
Unit 3	96.2803
Unit 4	96.2804
Unit 5	96.2805
Unit 6	96.2806
Unit 7	96.2807
Fire Specialist	96.2812
Fire Officer	96.2813
Fire Seminar	96.2814
Regional Fire School	96.2815
Industrial Fire Brigade	96.2816
Inst Fire Brigade	96.2817
Public Fire Education	96.2818
Rescue Practices	96.2831
Vehicle Rescue	96.2832
Other Rescue	96.2830
Emergency Medical Care	96.2840
Standard First Aid	96.2841
Multi-Media First Aid	96.2842
Advanced First Aid	96.2843
CPR	96.2844
Criminal Justice	96.2821
Law Enforcement	96.2922
Corrections	96.2823
Bus & Indus Security	96.2826
Electrical Safety	96.2850
Government Employees	96.2870
Other Public Service	96.9900

SPECIAL PROGRAMS

Developmental Occupational	98.0102
Programs Level I	99.0102
Developmental Occupational	98.0202
Programs Level II	99.0202
Remedial Instruction	98.0312
and/or Learning	98.0322
Center	98.0314
	98.0324
SEE NOTE BELOW	99.0312
	99.0322
Specialization in one	
Occupational Area	99.0402
Guidance	98.0503
	99.0503
Vocational Improvement	98.0602
Program Supportive Services	99.0602

NOTE: For direct operated remedial instruction and/or learning centers, the following applies: students with a prescriptive program or in remediation prior to entry into a vocational program should be reported under 98.0312, 98.0314, or 99.0312. GED and Drop-in students should be reported under 98.0322, 98.0324 or 99.0322.

VOCATIONAL TEACHER DATA FORM

INSTRUCTIONS: Carefully read each item below and answer as accurately as possible. If you have questions, check with your principal. Write any additional information or explanations needed on the back of this sheet. Then return it to whomever is designated to collect the forms.

A) List your program area, specific program title, and O.E. code. For example: Industrial Education - Masonry - 17.1004. If in doubt about title or code, refer to the information sheet supplied to your principal or supervisor. If you teach in more than one area, please list the are in which you are primarily certified or in which you spend most of your teaching time.

PROGRAM AREA	PROGRAM TITLE	O.E. CODE
____________	____________	____________

B) SEX Male ______ Female ________

C) AGE (as of Sept 1, 1984): ____ yrs.

D) PRESENT TEACHING RANK Rank 1 ______ Rank 2 ______ Rank 3 ______

E) WHERE WAS YOUR FIRST TEACHING JOB? ____________________ County ____________ State

F) YEARS OF TEACHING EXPERIENCE (as of Sept 1, 1984) ______ yrs. (Enter zero if this is your first year.)

G) Circle the highest degree or certificate you have COMPLETED

NONE   I.E. 24 hr Program (pre-1977)   64 Hr Cert.   B.A./B.S.

5th Yr.   M.A./M.S.   Masters+30   Doctorate   OTHER

H) If you are presently enrolled in a program, please circle it below and record both the number of semester hours remaining before completion and the name of the college or university.

64 Hr Cert.   B.A./B.S.   5th Yr.   M.A./M.S.   Masters+30   Doctorate   OTHER

1) Hours to be completed ______________________

2) College or University ______________________

I) Circle your ultimate DEGREE or CERTIFICATION GOAL.

64 Hr Cert.   B.A./B.S.   5th Yr.   M.A./M.S.   Masters+30   Doctorate   OTHER

J) What institution awarded your FIRST degree or 64-Hour certificate?

____

K) What institution awarded your MOST RECENTLY COMPLETED degree or certificate?

____

L) What problems have you encountered while trying to take courses or complete a degree?

M) What courses would you be interested in taking in the future?

Do Not Write
In This Space

1-5

— — — — — —
6-11

12

13 14

15

16-19 — / —

20 21

22

23

24 25

26 27

28

29 30

31 32

Appendix E. Letter to Vocational Teacher Education Department Heads/Coordinators

UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY 40506-0017

COLLEGE OF EDUCATION
VOCATIONAL EDUCATION
43 DICKEY HALL

Dear

Recently I talked to you by phone regarding our project, "Vocational Teacher Preparation and Programs: Analysis and Needs." As I told you, we in the Department of Vocational Education at the University of Kentucky are attempting to analyze vocational teacher education programs across Kentucky. Commissioned and funded by the Kentucky Department of Education, project activities include collection of data about preservice and post-baccalaureate teacher education programs as well as data on vocational teachers and vocational enrollments, especially in regard to supply and demand.

I appreciate your agreeing to help me with this project. As I explained, I need your help as coordinator or head of vocational teacher education at your institution, and I need the help of each of your program area heads.

Teacher education data collected will be tabulated, with institutions and programs identified in the final report. Therefore, it is especially important that all institutions and program areas participate to the fullest extent possible.

To most effectively help me in this effort, use the following procedure.

1. As head of Vocational Education, fill out all the information requested in the instrument labeled "Department Head/Coordinator Questionnaire." Use department records, NCATE reports, State Department forms or other available sources to get the information. It is very important that you coordinate your data with that from your program head(s) so that everyone is listed, but without duplication.

2. Give instruments labeled "Program Area Questionnaire" to the appropriate program heads and ask them to participate, emphasizing the importance of this project (A blank instrument is included in case I missed an area. Xerox more if needed.) Ask them to be as thorough as their records will allow. They also may need to use department records, NCATE reports, State Department forms, etc. as sources for some of the older data.

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3. As I mentioned, I plan to pick up the forms personally during the week of ________________. I would like to meet with you at that time, as I may have further questions. (Please collect the instruments from your program heads before our meeting.) If some of the program heads have questions or problems with the instrument, I would like to meet with them individually or as a group that day. I'll call you in a few days to set up an appointment.

If you or your program heads have questions, please feel free to call me at (606) 257-5691, preferably mornings. I'm looking forward to meeting you in the near future.

Thank you so much for your cooperation in this project. It's success depends heavily on your help.

Sincerely,

Charlotte Tulloch
Project Coordinator

acm/

Kentucky Department of Education

Alice McDonald, Superintendent of Public Instruction
Capital Plaza Tower, Frankfort, Kentucky 40601

M E M O R A N D U M

TO: Kentucky Vocational Teacher Educators

FROM: Wilburn J. Pratt, Associate Superintendent
of Vocational Education

DATE: January 8, 1985

SUBJECT: Teacher Education Questionnaire

In order to help us and to help you plan, the Office of Vocational Education is supporting the Kentucky Vocational Teacher Education Project to analyze present status and to predict future needs. We request your cooperation in supplying the requested information.

elg

Appendix F. Questionnaire Completed by Teacher Education Department Heads/Coordinators

Institution: ____________________

DEPARTMENT HEAD/COORDINATOR QUESTIONNAIRE
KENTUCKY VOCATIONAL TEACHER EDUCATION PROJECT

INSTRUCTIONS: Read each item carefully and provide the requested information. Use departmental records, NCATE reports, and any other appropriate resources to get as accurate and complete a record as possible.

1. Describe how vocational teacher education is organized and administered at your institution. For example: "Vocational teacher education program areas are in a department of vocational teacher education under the College of Education," or, "Vocational Teacher Education programs are in various subject matter departments and coordinated by a Coordinator of Vocational Education who is in the College of Arts and Sciences," or whatever best describes your situation. (Note: Each program area head will be asked to specify department and/or college ties.)

2. Describe the typical or recommended enrollment pattern for undergraduate students in any program area not covered by the Program Head Questionnaire. For example: "Students enroll in special education for two years and transfer to vocational education for their junior and senior years."

3. List all degrees offered by your institution in vocational teacher education.

   a. Baccalaureate degrees (please list)

   b. Master's degrees (please list)

   c. Specialist degrees (please list)

   d. Doctorate degrees (please list)

   e. Other (please list)

INSTRUCTIONS:

Questions 4, 5, 6, and 7 are designed to reflect vocational teacher education faculty and students who are not assigned to specific program areas but who are involved in the preservice, inservice, and/or post-baccalaureate teacher education program. Therefore, please check with program area heads, if necessary, to see that all appropriate faculty and students are recorded, but that there is no duplication.

4. List below any professional vocational education faculty involved during 1984-85 in preservice, inservice, or post-baccalaureate vocational teacher education at your institution who would not be listed by program areas. This might include vocational department administrators, instructors of across-the-board courses in vocational education, and teaching assistants not in a specific program area. However, it should not include project staff or others not directly involved in teacher education.

   Professional Vocational Education Faculty (those who teach or administer professional teacher education courses:)

   a. Number Full-Time in Vocational Education (more than 50%) ____________

      Number with Doctorate ____________
      Number with Masters ____________
      Number with Bachelors ____________

      Number with K-12 School Experience ____________

   b. Number Part-Time (50% or less) (i.e., adjunct teaching assistants or instructors) ____________

      Number with Doctorate ____________
      Number with Masters ____________
      Number with Bachelors ____________

      Number with K-12 School Experience ____________

5. For each of the years listed below, record the number of full-time and part-time faculty at your institution who have been involved in vocational teacher education but who would not be listed by program areas.

Year	Full-Time (more than 50%)		Part-Time (50% or less)	
	Fall	Spring	Fall	Spring
1979-80				
1980-81				
1981-82				
1982-83				
1983-84				

6. Record the number of students enrolled in some course in post-baccalaureate vocational education programs in 1984-85 who would not be counted and recorded by the various program areas. This might include people in a general vocational program at the Master's level or above, people earning special certificates not included in the regular program areas, and so on. Under "Other," list and describe situations that do not fit the categories available. Use additional paper, if necessary. Make sure each student is counted only once.

a. 5th Year ______

b. Masters ______

c. Rank I ______

d. Specialist ______

e. Doctorate ______

f. Other ______ ______________________________
(please describe)

______ ______________________________

______ ______________________________

______ ______________________________

______ ______________________________

7. For each year on the form below, record the numbers of completions or graduations in your post-baccalaureate vocational education program for any students who would not be recorded by the various program areas. This might include general vocational graduates, and others. If necessary, check with program area heads to avoid duplication.

COMPLETIONS AND GRADUATIONS

Year	Fifth Year	Masters Degree	Rank I	Specialist	Doctorate
1979-80					
1980-81					
1981-82					
1982-83					
1983-84					

8. The purpose of this survey has been to gather historical and current data on vocational teacher education programs in Kentucky. However, this data does not reflect plans for the future. Therefore, if there are changes about to occur in your program (such as staff increases or decreases, adding or dropping programs, reorganization, or other such anticipated events) please describe them below.

ADDENDUM to Dept. Head/Coordinator Questionnaire, Kentucky Vocational Teacher Education Project

School: ______________

9. For each category below, record the number of students you consider to be presently enrolled in your program who would not be counted by program areas, whether or not they have taken courses in 1984-85. This should include students counted in question 6 as enrolled in some course as well as those who are on your records but who have taken no vocational teacher education courses this year.

a. 5th Year ______

b. Masters ______

c. Rank I ______

d. Specialist ______

e. Doctorate ______

f. Other ______ ____________________________

(please describe)

______ ____________________________

______ ____________________________

Appendix G. Letter to Teacher Education Program Heads

UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY 40506-0017

COLLEGE OF EDUCATION
VOCATIONAL EDUCATION
43 DICKEY HALL

Dear Colleague:

Vocational teacher education in Kentucky has had a season of "ups and downs" during recent years. In an effort to look at the present state of vocational teacher education, staff members in the University of Kentucky's Department of Vocational Education are conducting a project entitled, "Vocational Teacher Preparation and Programs: Analysis and Needs." Commissioned and funded by the Kentucky Department of Education, project activities include collection of data about preservice and post-baccalaureate teacher education programs as well as data on vocational teachers and vocational enrollments, especially in regard to supply and demand.

We are asking you to help us by filling out the attached questionnaire regarding your program area. Teacher education data collected will be tabulated with institutions and programs identified in the final report. Therefore, to successfully complete this project we need the help of every vocational teacher education program head in Kentucky. We realize that some of the requested information may be a bit hard to find. But we also feel that vocational teachers and students will benefit from an analysis of this sort.

You probably received this instrument from your vocational teacher education department director or coordinator. Please attempt to provide all the information requested. Be as complete and as accurate as your records will allow. Use department records, NCATE reports, State Department forms, or other available sources. Then, return the instrument to your director or coordinator.

If you have questions, please call me at (606) 257-5691, preferably mornings. I will be glad to help you in any way I can. I also plan to personally pick up the instruments from your director/coordinator. At that time I would be delighted to meet with you if I can help. Check with your director/coordinator about the date and time of that meeting.

Thank you for your help in this effort.

Sincerely,

Charlotte Tulloch

Charlotte Tulloch
Project Coordinator

/pd

Appendix H. Questionnaire Completed by Teacher Education Program Heads

Institution: ____________________

Program Area: ____________________

PROGRAM AREA QUESTIONNAIRE:
KENTUCKY VOCATIONAL TEACHER EDUCATION PROJECT

INSTRUCTIONS:

Read each item carefully and provide the requested information. Use departmental records, NCATE reports, and any other appropriate resources to get as accurate and complete a record as possible.

1. What are the admission standards for entrance into your preservice teacher education program?

   a. Grade Point Average (G.P.A.): ____________________

   b. Test Scores

      CTBS scores: ______________

      Other tests and scores if any: ____________________

   c. Other standards (please describe or list):

2. What college(s) and/or department(s) oversee your program area? For example: "Home Economics Education: Administered by the Department of Vocational Education, which is in the College of Education," or: "Under the Division of Home Economics in the College of Arts and Sciences," or whatever describes your situation.

3. Describe the typical or recommended enrollment patterns for undergraduate students in your program area. For example: "Students enroll in agriculture for two years and transfer to agricultural education for their junior and senior years."

4. Describe a typical program of studies for an undergraduate in your teacher education program area. Include general studies courses, subject matter courses, and professional education courses. This might be the "typical" program listed in your University/College Catalog. List courses, course number and semester credits. Convert any quarter or term credits to semester credits. You may want to simply duplicate appropriate college catalog information and attach it to this form.

Course	Course Number	Semester Credits

5. How many contact hours do students in your program spend student teaching? ____________________

6. List name, course number, and semester credits of any teacher education courses you require in your preservice teacher education program not specifically required in the minimum state certification requirements.

Department Name	Course Title	Course Number	Semester Credits

7. How many faculty members and administrators do you have in your teacher education program area as of September 1, 1984? List only those involved in preservice, inservice, or post-baccalaureate teacher education in your program area. Do not list support staff or project personnel.

Professional Education Faculty (those who teach professional education courses)

a. Number Full-Time in Vocational Education (More than 50%) ________

Number with Doctorate ________
Number with Masters ________
Number with Bachelors ________

Number with K-12 School Experience ________

b. Number Part-Time (50% or less) ________

Number with Doctorate ________
Number with Masters ________
Number with Bachelors ________

Number with K-12 School Experience ________

8. List the numbers of full-time and part-time faculty on the teacher education faculty for your program area for each of the years listed below. Include only faculty and administrators involved in teacher education. Do not include project staff or faculty who teach only subject matter courses such as typing or nutrition.

	Full-Time (more than 50%)		Part-Time (50% or less)	
Year	Fall	Spring	Fall	Spring
1979-80				
1980-81				
1981-82				
1982-83				
1983-84				

9. Record the number of preservice students currently enrolled in some course at each level in your teacher education (certification) program area for the school year 1984-85. "Other" might include graduates doing student teaching or other such unspecified groups. Make sure each student is counted only once.

   a. Freshmen ________

   b. Sohomores ________

   c. Juniors ________

   d. Seniors ________

   e. Others ________ ______________________________
   (please describe)

   ________ ______________________________

   ________ ______________________________

10. Industrial Education Level III, and Distributive Education where applicable: Record the number of inservice students enrolled in your program area for the school year 1984-85.

    a. 64 hours ________

    b. 64 hour/BS degree ________

11. Record the number of students enrolled in some course in your program area at each post-baccalaureate level for 1984-85, count each student only once.

    a. 5th year ________

    b. Masters ________

    c. Rank I ________

    d. Specialist ________

    e. Doctorate ________

    f. Other ________ ______________________________
    (please describe)

    ________ ______________________________

    ________ ______________________________

12. For each year on the form below, record the number of graduates from preservice teacher education program (or inservice program for Industrial Education Level III, and Distributive Education where applicable) as well as the number of those applying for teacher certification. Then, indicate present employment status for graduates, to the best of your knowledge.

CERTIFICATION AND EMPLOYMENT OF VOCATIONAL TEACHER EDUCATION PRESERVICE GRADUATES

		Applied for Certificate		Present Employment of Graduates				
Year	Number of Teacher Education Graduates*	B.S. Degree: Preservice	5 Year: Inservice**	Employed in Job Requiring Certificate	Employed in Related Job, No Certificate Needed	Employed at Unrelated Job	Graduate School, Unemployed, Armed Services	Don't Know
1979-80								
1980-81								
1981-82								
1982-83								
1983-84								

*Include all students who graduate having met the requirements for teacher certification. Do not include graduates who would be considered uncertifiable, such as "Business Education" graduates who do not take teacher education courses.

**Only for Industrial Education Level III, and Distributive Education if applicable.

13. For each year on the form below, record the number of completions or graduates in your post-baccalaureate vocational eudcation program.

COMPLETIONS AND GRADUATIONS

Year	Fifth Year	Masters Degree	Rank I	Specialist	Doctorate	Other	Total
1979-80							
1980-81							
1981-82							
1982-83							
1983-84							

14. The purpose of this survey has been to gather historical and current data on vocational teacher education programs in Kentucky. However, this data does not reflect plans for the future. Therefore, if there are changes about to occur in your program (such as staff increases or decreases, adding or dropping programs, reorganization, or other changes) please describe them below.

ADDENDUM to Dept. Head/Coordinator Questionnaire, Kentucky Vocational Teacher Education Project

School: ____________

9. For each category below, record the number of students you consider to be presently enrolled in your program who would not be counted by program areas, whether or not they have taken courses in 1984-85. This should include students counted in question 6 as enrolled in some course as well as those who are on your records but who have taken no vocational teacher education courses this year.

a. 5th Year ______

b. Masters ______

c. Rank I ______

d. Specialist ______

e. Doctorate ______

f. Other ______ ________________________ (please describe)

______ ________________________

______ ________________________

Appendix I. Materials Sent to Members of the University Council for Vocational Education

UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY 40506-0017

COLLEGE OF EDUCATION
VOCATIONAL EDUCATION
43 DICKEY HALL

January 8, 1985

Dear

In Kentucky, as in many other states, vocational education has faced financial and enrollment problems over the past few years. In an effort to analyse the present situation statewide, the Department of Vocational Education at the University of Kentucky has been funded by the State Department of Education to conduct a project entitled "Vocational Teacher Preparation and Program: Analysis and Needs." The objectives of the project include gathering data on vocational teacher education in Kentucky as well as on vocational teacher supply and demand.

In an effort to make the final report more useful to Kentucky vocational teacher educators, we have also decided to seek out some descriptive information on state-of-the-art vocational teacher education across the nation. This is where we need your help! Enclosed is an informal questionnaire. We would appreciate it if you would take some time during the next week and respond to the questions. Whenever appropriate, list names, addresses, and phone numbers as we may want o follow up on some of the information.

The information you provide may be used in narrative form and cited to you unless you request otherwise.

When completed, please return the questionnaire to us in the enclosed envelope. We would appreciate receiving it by February 15, 1985.

Thank you so much for your help!

Sincerely,

Clayton P. Omvig, Chairman	Charlotte Tulloch
Department of Vocational Education	Project Coordinator

acm/

AN EQUAL OPPORTUNITY UNIVERSITY

Institution: ____________________

STATE-OF-THE ART VOCATIONAL TEACHER EDUCATION QUESTIONNAIRE

1. Think carefully about the vocational teacher education programs at your institution and in other institutions across the state or your region. Do some of them stand out as being well above average, or outstanding in some particular way? Now, please describe those outstanding programs. Include all of the following information that you can. Use extra paper if necessary.

   A. Specify the institution and program area(s).

   B. Briefly describe the program and tell what makes it distinctive or the state-of-the art.

   C. Include names, addresses, phone numbers where appropriate.

   C. Include available data (or references to such data) regarding the effectiveness of the program.

2. Do you foresee any significant enrollment changes in vocational education in your state? Nationwide? If so, please explain.

3. Due to budget cuts, many states have had to cut back in vocational teacher education. How has vocational education in your state been affected? (Were positions cut outright? Were vacated positions filled, frozen, or eliminated? Were departments consolidated? Were programs eliminated? Do you feel any cuts simply "trimmed the fat," or did they harm essential positions and programs? Or, instead of all these dire consequences, did your program hold its own or grow in some way?) Please explain.

4. Because of changes in the financial situation, some universities, departments of education, and/or state departments may have developed new ways of funding vocational teacher education needs. If you are aware of any unique methods of funding vocational teacher education, either in your state or in other states, please describe.

5. Is vocational teacher education in your state considered to be a part of the state program of vocational education, sharing in resources and work load, or is it considered an independent curriculum program area, such as math or English teacher education might be? Please describe the present situation in your state. Comment, if you care to, on the effectiveness of the situation and your view of the probable future in regard to that arrangement.

6. How is your state organized to provide education leading to certification for non-degree trade and industry teachers?

7. Are you aware of any state (yours or another) that has some type of centralized vocational teacher data system? Such a system might collect data on vocational teachers including age, rank, experience, location, areas taught, certification, education, and so on. If you know of the existence of such a program, please describe it if you can and/or identify the state and a contact person

TO: Vocational Teacher Educators

FROM: Clayton Omvig and Charlotte Tulloch

DATE: February 28, 1985

SUBJECT: Returning Vocational Teacher Education Questionnaire

In January we sent you a questionnaire seeking some information on vocational teacher education across the country. Many have been returned, and the information has been most helpful

We have not received your questionnaire, however. In case it might have been lost, we are enclosing a copy in hopes that you will take a little time to respond.

Thank you so much for your help!